

- 574

Coll. .39 .58 .85 1.26 1.85 2.7 4. $\frac{67}{100}$
Fored 1.2 1.8 - 4

532

Little action on grass Jefferson Highlands, N.H.
Ht. blotched, shiny black; translucent whitish
mottling at sides, a patch at vertex of
each lobe and a broken inverted V. white
midrib S., a few setae; w. 1.2" Body a
little flattened, palea somewhat sola but
feet normal. Feet large, black with
short white bristles. Black hairs mixed
with pale, ir very small, 3-10 each, in line
if not slightly protracted, no plate
black.



Body with whitish pores,
blotched with and off the very
thin setae. A black d.
black band follows it be-
tween waist & 1/2, a whitish, transverse band
lateral one & pieces of brown & black S-S.
Gsh & anal pl. black. Head brown or tan
whitish. S-S band. Molt power Hd as before but
the white spaces smaller. Body long, mottling
strewn with black, a pale V'd line along
(shaded)

red blotched between them and 8-9.

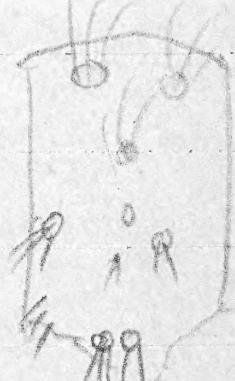
Hair short, stiff, black & white. Molt June 27
 Hd bilobed black, \triangle yellow; blade part on in large
 conuent pedicles, leaving a number of white wedges
 on the sides, a streak over apex and a V-mark II
 IV, lowest of 4 ant. white. Body black, a white
 sd line blotched with red between i & ii, sides smoothes
 with white, a white ss band passing over v, with
 orange blotch above it over the tiny iv. Ninth large
 i-iii & vi dark reddish, i-ii on 12 \square . Dorsal
 black broken by white dot close in incisive
 spiracles, white. Hair short, stiff, black & white.
 Rows of white ss. 10th entognath, 10th large. [cf 30B]
 Lett the white markings are pale yellow!

Molt Jy 5 Hd 4.2 = 30B q.v. (also see blow larva)

= Arsionche albicans

612 gen stage May 27
 Hd 4.2 (st. hd 3.1)

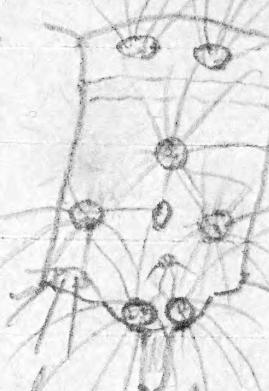
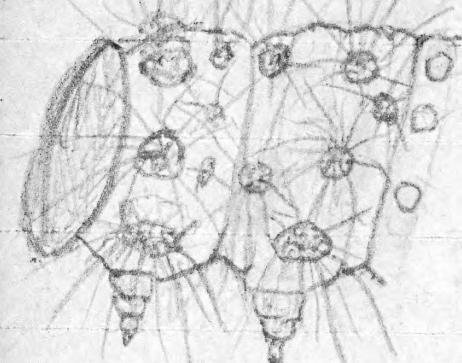
No change (desc.
 from blow larva)



stage 5 1902
 BB 612

Calc. .61 .92 1.4 2.1 3.2 ratio .66
 Found - .9 1.5± 2.1 3.2 4.2

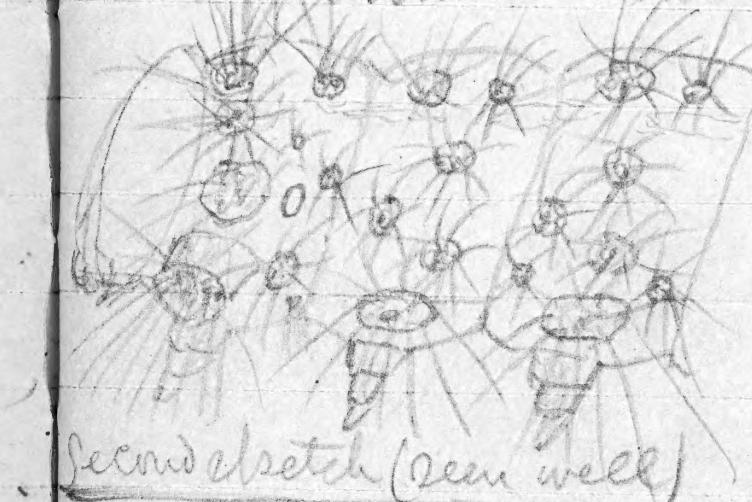
(see below) 533 (see 612)



On poplar (P. trem.)
 Jefferson Hgds. Wt
 June 21 '95. Gray,
 flattened, soft hairy.

Body black with a faint white sd line
 Hair fine, soft, white, not very long but
 dense; appearance gray, pink & darker
 near black. Body rather flattened, anal
 feet spreading, divergent, sd mark in 2 large

In 612 vi is a single wavy, and ant.
 the apical ant. 2nd wavy is higher up. (See hd. 9)



Molt June 27 Hd 1.5±
 not much less prominent
 Body all covered with
 2nd hair almost like those
 from the wavy. Traces of

a wavy in front of iii, v lost in 2nd hair. vi rather
 produced into a short lappet and 12 enlarged
 dorsally, arranged greatly oblique now, whereas
 very plan before. Body gray, darker dorsally

an orange sd line & narrow white lateral one. Hair soft fine, dense, black & white, the dark hair predominating d. a few of orange ad d. dots above i & ii. Hd gray hairy.

Molt July 4 Hd cost blue gray, black dotted with fine short pile ^(Shad 2.1). ^{green} Roof flattened, a slight bump on 2, a large sd hump on 2. Other vent to, even of obolet, ri produced into a short lappet. Hair fine & soft, not long. Blanket d. pale & thick 3 or, larger 2. Legs 5-annulated. Dark gray. an orange add-dual dot on 2d, 4th annulet, a narrow sd line & transverse bands concealed in folds of ^{in middle of 3 & 4} 3-4 and 4-5. Dorsum black dotted with blue leaving a narrow black add d. dot on each annulet, those opposite the orange dot moved out a little. ^{Interg. regim} more finely blue dotted with 2 ^{Int. supra} faint, pale longitudinal lines. Lappets a few gray. Numerous lappet lines, the abd. ones with post. part of vi most produced a lateral black spot on 3, 4 and 12.

Molt Aug 10 Hd 3.2 ± As before. sd. above sd line at the ant. end of each seg a pale gray space, forming a series of intersegmental lighter gray spots 2 lappets on 2. Three on abd. double.
(see blown larva)

Evidently = Phylloidesma americana

534 = 25

Notodactria? on sugar plum Jefferson Ward N.H. June 25 1895. Egg. Sheel, 3mm edge of leaf on underside. Spherical, flat at base O green glas of aquuish white 1.1 X .7 high reticulation lines but rather high & with hinder face, rather small & regular hexagonal. the pores at the angles distinct bead like, showing in both lights.

Larva Hd rounded, pale brownish ^{green} Roof smooth shiny, translucent green with a faint white sd line. 12 slightly enlarged, segs. ⁴⁺ annulate, setae distinct, fine pale, pointed sits on the midrib and prows each side. Setae normal, IV 55 post, 8 distinct ^{posterior} and (sixteen) 3 setae on leg plate ^{posterior} which

is concolor & obscure as also other abd. setae. Legs all pale green; no dark plates or trachea. Anal feet rather slender & directed somewhat back. Molt June 28 Hd large, high, slightly above 2, gen. bifid, narrowing a little to vertex, △

small, green eye black, mouth brown, w. 1.2m. feet normal, the anal rather weak, often not used. Setae fine, dark, but not very short, 6 present, segments faintly 3-annulate. Green, rather dark from the fold of transparency a faint yellow sd line. A very thin faint skin; tracheal line very distinct against fold. Molt July 10 Hd white green, slightly shiny, shape round not at all below 2 though slightly higher, indented labrum white, jaws & ocelli dark. Body green, with white bloom a nose not very distinct white sd line. Legs 4-5-annulate with large white flattened granules, like bubbles but non-setiferous line large transverse granular; anal rim pale green. Spiracles pale brown tiny. Setae fine short, pale, normal, single. 5-6 on green leg plate. D. region whiter than lateral one. Hd 3 ±. Lata very punaise white, granular, sd white anal rim yellow, Hd less punaise, jaws concolorous.

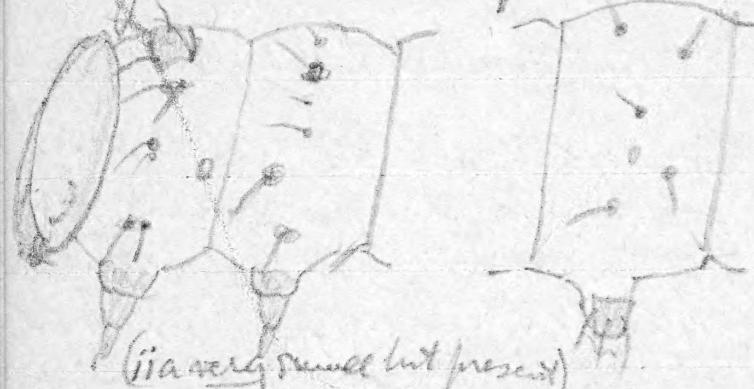
Molt July 18 Hd 4.6 ± High, not bilobed, rounded, 4 small venting about level with 2, labrum white, jaws yellow green, white bloom also. Body green covered with flat white elliptical granules on the sides, under more confused d, forming a straight white sd line 3-12, composed of irregular granular areas. Spiracle yellowish with brown edge, anal rim yellow leg plate green. The feet green. Ocelli black centrally, white rimmed setae very short, near obsolets, normal, but a considerable number on leg plate. Segments not very regularly 8-annulate. Evidently = Nadata gibbaa.
(See bloom example)

Calc. .38 .55 .78 1.12 1.6 2.3 water 90
 Found .4± .5 .7 1.15 1.6 2.5±

the 5-fold ground appears in a series of white patches, the largest like the red black ventral dark. Hair very distinct & stiff, white, perfectly single & normal for head. Noct. (see brown larva) 

535 - 538

Eutrepsia sp. on Epilobium, Jeffreys Highlands



W.M. Jones (2) 1855

~~IId~~ bilobed, ad
pale brown, w. 45

Red yellowish wattle

3 enlarged setae 5-7 also greatly lumped up
but apparently only slightly enlarged and altered
oth canal & leg. plates blackish. Tibiaels
brown, mostly minico, but those on 5-7 and 11
surrounded by large spots, those on 12 with small
spots. Thorax dark. Abd. setae normal for stage I.

III June 28 Same at first, a little more brown
spotted. Setae fine pointed, tubercles black, sub-
globose present. Anterior a little swollen but
not much, not noticeable except that leaves will
bear off the leaf. Rest white and elevated.

Later tubercles black, conic, irregular in size. Few marks around them slight. End gear from food
a dorsal line of irregular opaque white checkings
~~most~~ July 2 (Sh. 14.5) Large black conical tubercles with long
radiating. Body greenish blotched with opaque white
esp. d. and a few brown markings as in last

stage. Feet black. Hd orangeish, its tubercles all
strong black as on body, a little brown around
mouth and eye. 4-7 & 12 form 2 humps as
held by larva, apparently really a little enlarged.
Molt July 7 (sh. hd. 7) Hd 1.2± Hd white, the black spot
of before supplemented by many small dusky spots
the black tubercles form 3 trans. rows; a black dot to
line above mouth, Hd white a little browned with
orange on 5, 6 & 12 d. and along the margin of is wh. length
tubercles, large Δ black, bars all pale, either stiff
and long single Hd is mottled with brownish black in
irregular streaks between the tubercles except 5d where
the white ground prevails broadly. Prism of spiracles
thoracic feet & leg plates black
Molt July 8 (sh. hd 1.15) Hd 1.5± white with many black
spots, all spots of preceding stage equally black
body as before, the black tubercles & numerous
irregular marks velocity. The orange shades spread
tending to form transverse bands, on 5, 6, 11 & 12
the faint orange bands are complete, on the other
segs. a ss spot with perhaps a tint of the orange
above. The black marks are thickest ventrally, pre-
dominating, thick laterally, the sd & a very d. line
they form a series of irregular marks, enclosing a broken
white d. line of pinkish color. Feet black, hair long pale
The appearance is like white black mottled with a white
sd line & red bands, but the rest goes streak with less as above
so far because white patched, most dusky interspace 11-12. Orange
bands more distinct passing middle of each seg 4-12.

~~May 10~~ July 10 Hd 2.5 ± Hd as before, white with many black spots of various shapes mostly antlers black. The ♂ has a dark area at base a little above and inside a short V-shaped area as app. The sides & vertex have several large rounded spots & some smaller scattered ones. Roof white the eggs. Handled with care, obscure except on 5, 6 & 12, areas of 4 & 12 greatly blushed up. Vertically large velvety black, but low corrugations almost flat not produced. The velvety black marks on the body form narrow, irregular broken and dotted transverse lines, some not represented. A regular markings, all broken and so as to give appearance of white and brown, about 6 per egg, but so broken and irregular that there is no positive number. Subconspicuous, four certain branching marks irregularly X or Y shaped.

Calc. .64 .8 1.0 1.3 1.6 2.1 2.6 3.2

Found(6) - - - 1.3 1.6 2.1 2.6 3.2

" (536).65 .8 1.3 2.2 3.3

536 = 6 (Guinea)
July 10

~~Apatelodes tonifactor eggs from Miss Norton from
proface from J. Doll. Laid June 25 1895.~~

~~Flat below, above rounded, flattened eggs in wavy~~

~~or a little hollowed in a ring near edge~~

~~translucent pale yellow, d. 1.5, height .4 mm~~

~~Reticulation faint, narrow, the depression~~

~~rounded hollow, shallow, obscure, thru edges~~

~~forming the reticulation which are consequently~~

~~made at S but hardly any breadth between~~

~~pres visible as bright points at S. At base is a~~

~~distinct rim, full broad, thickened at margin~~

~~contents full of oil drops, some distinct thin marks~~

and 65 (in alcohol)

~~Hatched July 10 Hd whitish w. 6 mm. Body white~~

~~tightly covered with long fluffy white hair~~

~~without evident warts. Hair very fine, thick-~~

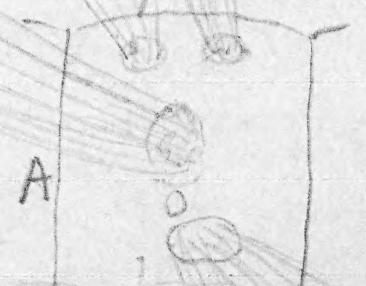
~~down-like and long with a few more stiff~~

~~hairs. A lot of d. hairs. A large lateral tuft~~

~~anterior below behind~~

~~Several on leg plate. A~~

~~wart areas perfectly flat~~


Smooth
no visible
granules

Drawn July 10. I think O.K. but
can't be sure of this one
(in line with iii)

Another → Vincent but
mostly colorless granules

Jul 17. On 4

another in front
at 4. Can't be

very positive
as hairs are all
colorless and the

fluffy hair mix everything up.

Pulled off some hairs. This OK. The hair over on 4 in
front may be 2^o perhaps ^{No hairs present} unpaired and thus is a
single hair between i and ii. 16+17 is really part.

Molt July 19 Body white with a d. row of quinate black
dashes 5-12. Hair very fluffy white, long. Hd. 1.8 mm
wings about as before. 2^o hairs not seen, if present
can not tell from those bending over from front.

a few black hairs dashed from 3, 4 and 12. (Sh. 1.8)

Molt Aug 2 Same; white hair awful fluffy, 4 or 5 mm long
fine & soft curving backward. Hd 1.2+ (Sh. hd 1.3)

Molt Aug 2 a white fluffy asperous hair as before is very
abundant long curving also on body Hd white 2 mm ±
a thin black band on 2d and a few black ones 3-4.

Molt Aug 11 Hair fluffy white with long black dashes
but appearing single pencils on 3, 4 and 12. Body
greenish white with a row of lateral black spots be-
side the d. ones. Hd. white 3.3+
(See blm larva) ✓

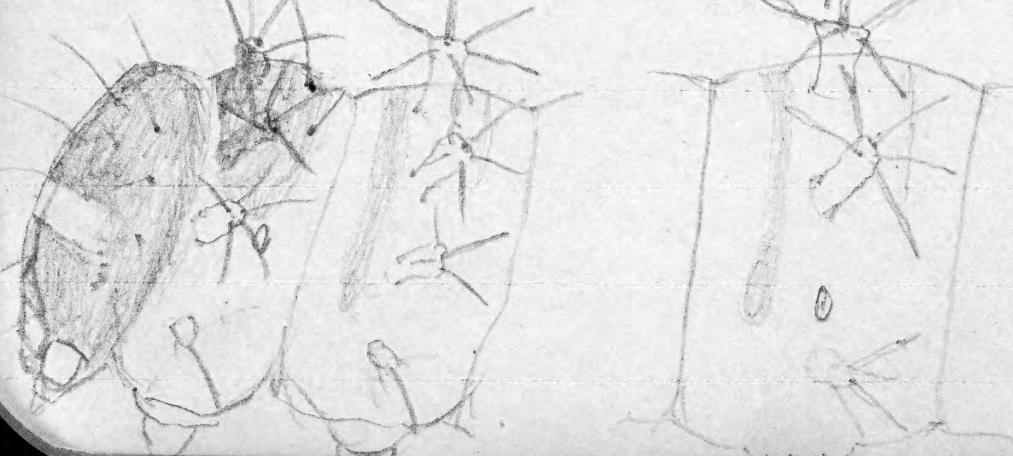
Calc. 1.07 1.61 2.44 (3.0) 3.7 (4.5) 5.6

Found 13 1.6 2.5 3.2 3.7

rats $\frac{66}{87}$

537

Eggs of *Callosamia angulifera* from Miss Merton
Elliptical, flattened above & below or a little
concave, one end higher than the other 1.8 x 1.4
x 1.0-1.2 mm. Surface irregularly bumpy granular
arranged indistinctly in reticulation. All
covered thickly with a layer of fine white
varnish. Color of egg itself slightly yellowish
Hatched July 3 Hd black with a transverse white
band across mouth and another at upper part
of clypeus; w. mm. slightly bilobed, rounded,
setae few. Mouth elongate with a crown of pale
hair, all of same size. Oth. anal. pl. & tho.
fat black; body light yellow with smoky
base of 2 trans bands per seg. reaching smooth
a little more distinct toward extremities, bluish
parts and setae (on oth. black) all concolorous



Had no
tulip tree
and they
refused all
else & died

more from Miss Merton July 1895. Eating tulip tree.

Stg 1 July 27 Hd 1.6 white, a black line across
above mouth and 2 joined trans. patches
above D. Body whitish, seg. twice trans.
banded with black on each side of the
tubercles. Subs. all yellow, alite, with
weak seta and 6-crown. Oth. pale ex-
cept a single band. Setae pale.

Stg 2 Aug 2 Hd whitish, a narrow black line
across lower part of D, a spot in middle
of lobes & one on eye. w. 2.5. Body pustled
greenish white, tubercles reduced to black
buttons except O2 yellow, O3-4, pink
with black basal ring and O12 yellow with
black ring, all with fine small pale
crown. Anal pl. yellow edged on. with
black before. Feet green anal. partly
black edged. O3-4 salmon, colored or yellow

[Two small ones sthd Aug 8, lids 3.2, same but
hairs O 3-4 12 smooth, black buttons
reduced to oral elevated spots, black spot
on head smaller. Large ones did not, but]

Stg 3 Aug 9 Hd 3.7 Smooth, white, tubercles

represented by shiny black spot except
① 3-4 caudal and ② 12 yellow with
black black rings. Black dot on lobe
and eye, imperfect ring on anal foot.
Lip bare smooth.

~~Stud~~ Aug 13 but all dead. One was partly
shed, all that shows just as before.

538 cat. no. 11588

Egg laid by ♀ Alypia langtonii on leaves
of Epilobium in a jar, Jefferson Highlands June 29
~~Laid on the under side close to the projection
midrib. ♀ flat at base, low caudal, a little
pointed at apex. Micropyle depressed, surrounded
by 2 concentric rings, granular reticulate; from
the outer ring the round headed ridges run to
under surface. The ridges under them are a series
of rounded granules, but they alternate on suc-
cessive rows so that the spaces are many as
usual. Micropyle a circular cup-shaped area
of one circle of cells radiating from a center its
edge forming the first ring. From this the ridges pass
gradually over the outer ring becoming more distinct
the ridges in areas of confluence not worked, owing
to their granular nature. Diam. .55, height .3±
Whitish, not shiny, marked with dark red-brown to
irregular blotched ring or broken spots different
in each egg. Hatched July 8 Shape of 535 & looking
body whitish, food green when eaten, tubacles~~

*occidentalis
+superans

large, black. Hd pale brown, varying in shade in different larvae, eye black. So looping for a while ate the Epilobiums. Full of green food. Like 535.

Molt July 11 Hd. 5 ± pale. Not different from 535 II

Molt July 14 Hd. 7 ± Like 535 III. Tubercles much larger than before, conic; setae long and distinct.

Molt July 18 Hd 1 ± Essentially like 535 IV. Sd white, band seems narrower, only a breaking of line & marks. 5-8 white patches, esp. on 11-12.

Molt July 21 Hd 1.6 ± = 535 V. The black marks form irregular transverse black lines, broken and confused. Probab. 8th ag. as in octomaculata

Molt July 23 Hd. 2.3 ± c-sh red. Like 535 VI compared with brown larva, seems same, may come in shade. Black marks larger or smaller. 535 is a rather pale one.

Turned dirty purplish July 28, losing the yellow tint of the tanner bands, the yellow faintly spread from the bands and turned large orange patch on 11-12.

Sways May 15 1896 Alypia octomaculata!!

" Aug 12 1897 ♀ Laytonia, all spots white!

539 = 389

+ *Acronycta* on yellow brick Jefferson Hgh. N.Y.
Hd. 2 white, 4 black dots in each lobe, 1 apex,
lateral 1 eye, 1 beside it. Red white, dark brown
patches d. on 2, 5, 8-9, 12. Vents black; a narrow
white d. line vents with long setae & bushy
crown of small enlarged ends, a few of
which stay off on stem as 2d. Hair black
& white. D. wings spreading onto other
sep. faintly 12 □ it vents i-ii □ Hd 535 ±

+ *Others* on sugar plumapple. June 24. 1895
ash hd. 85
Hd white, pointed lobes, black patch at
vertex, on each side of claspers, one over eye.
W 1 mm. Body white, vents ~~i-iii~~ * all black
(~~black & pale~~) pointed conic with crown of hair
all red & black, crowded with short, 2d hair
enlarged at tip. 12 i-ii □. Dorsum broadly
streaked with dark brown, cut by d. 15 d
white lines. Hap. black & white sun of the
even black. Vents normal, i is rather small

etc. first, all nearly in a single transverse
line. * ~~July 25~~ Molt June 25 Hd black, a white spot

~~Wld sp. 7~~ = 389 g. w. Hd. 3.8 ± shading into black
below. (See figure 2) hair practically gone.

germinate at app. 5, white streaks on sides
apex of pointed lobes pale brown; has few
black hair. w. 1.4 ± Roof whitish as before
d. red line white, distal 1/3. Side strand
brownish. 13 pale, 2^o hair short, club-shaped
when actual, pink but more or less closely
margined with dark brown. Yata broad four
colored patches over 1-ii on each legs.

1504sp, L. & t. below black, darkened at
apex of lobes. Axilla pale streaks on sides
as above. D. quite h. Distal white, center
brown, w. 2.4 ± Roof dull purple, d. brown
purple, shading into reddish orange, each
leg. 1 around i-ii, 3d of each purple, 3d line
white brown below with purple, a faint
red line above. Mouth black. 12^o cutaway
pale ring, 12^o nearly all black. The first
leg flats black. Hair blackish, white & v
2^o very much reduced, obscured, fine black, not
coincident with lines, pointed tip is numerous.
13 pale like sides, 1st black taken up to
hair line white & v like that (or white)

| Calc. | .22 | .34 | .52 | .78 | 1.19 | 1.8 | val. 66 |
|--------|-----|-----|-----|-----|------|------|---------|
| Found. | | | | | .8 | 1.15 | 1.5 |

540

Streaks just mentioned on dogbane, L. & t. black
tanotupa but axilla streaks and sh. of
web; Sh. tan. Hd pale yellowish. Ventral
snout, eye & head w. 8 ± Roof black,
cylindrical, green, feet about above the
anal stripe. T. black, concolor, not
indicated by white, single, narrow, in
another dose of Sp. scale, w. post, 2.65 to
3 in. long. No marks. trachea evident
with lens magnifying 10x fine. Length 11 mm
diameter of body, fresh (B. b. d. 2)

not Sp. 15 Hd 1.8 ± w. Roof white 1.15
Sp. 15 Hd 1.8 ± w. Roof white 1.15

Sp. 15 May 11 1976 - a Deltoid.
(Cat. no 12133)

Spagatoma septentrionalis

541 = 498

C. regularis agg from Van Vinton laid June 25.
fatched July 10. Velocity black & white & black
cover out centrally defining a row of black
interspersed elliptical spots; a row of
white stripes dorsal at end. Horns all
brown black, the club at ends of antennae one
black. Same can exist or differ from 3
the species mentioned. White brachy labrum
brown, ex. Horns, otherwise very long as also
single d. m. (as specimen with a dozen of hairs)
hairs set on upper surface, curled J type.
Molt July 21 Hd dark red brown. Mandible
d. hair, 0.18 mm. Horns much as before
but longer, pointed etc., the long ones have
no club tips because simply pointed and
covered with numerous short bristles like
the short ones. Red colored as before but the
whole horn black, defining the elliptical
of black areas have spread to become
round etc. brachy labrum, a. d. brown

black line & 8d rows of elliptical spot on
wide edge of legs. An oblique line from vent.
edge of leg back to base of foot, black, bordered
below by a fringe of black. After lateral fold
smoky yellow. feet & vent. black. Thorax roof
shaded with black a red ring at base of
long hairs on 3 & 4. Horns now @ long as 2-4 &
circle on 12. Short in red. ② moderately long gray
short 2, 5-13. ③ short. ④ 2-6, 12, Band short.
Molt July 29 Hd 2.53 higher than wide, along
feet but not brown, parts under 2. Long
horn ① on 2 ② on 3-4 ③ 12 with a white stem
white above & very short pointed mandible
black or black tipped. Other spines short
with 5-7 branches spike with blades tip.
Body and d. brown black & 2-4, in few
in a stripe before spiracle bordering above
a brown which slopes off to 5 or
glaucous which runs down and edge of leg.
to 10+8 a reddish abdo. on base of the
horns. Length horns about 5 mm. Length
long hair 0.18 mm. else like last.
Molt Aug 7 (Sized 2.6) Hd. 4. Blackish tan brown
pale in all the antennae and S. Hd. blackish
brown with the oblique s-s fleshly white
bands bordered above with black. Horns
pinkish whitish, the ends of the short
thorn-like branches and tips of horns

black. A reddish oblique d. between ① 3-4
and legs reddish except a black wavy stripe
large & 8th segment yellow with 2 reddish
bands on each side. Spineless black.
Molt May 18 turning green on back. Red light
green, blunder black on abd, esp ventral
parts & before greenish white strip bands
edges above black. Spineless long black
Horns black, on long thoracic ③ red at
base. No feet & anal plates (3 large)
red. Long abd feet no disk with a
wide black strip down the outside.
Hd reddish with a large black patch
on face of each side, w. 6 mm.

Stimulus 542 = 546 ~~July 3~~ 15th
Egg of "Eulimna codes" scraped from vein (motor App.
Doll's pupae) laid July 10, 1895. [A] oval, very
flat, almost as thin as the ~~egg~~, then hatched, laid
in a mass of 50 or more, imbricate so as to
overlap, rows like shingles in roof, neatly
and regularly set. Transparent, yellowish,
clear, the shell covered with meat irregular
irregular, longitudinal or even quadrangular
reticulate opaque lines; rarely one of these all
mass is circular, the lines are marginally
perfectly raised, but very distinct, before
smooth and level, or a little pressed down
till a sort of sun shading ^{They hatch in 10 days} 1.8 X 1.2 X 0.1 mm.
Hatching July 20 outline of stimulus. Entirely yellow
yellow, no marks. Holes a little whitish
D Development long, clear - blue; eyes brown;
3 mm ^(adult) [The Ctenophore curled on its side, the
head and neck stretching, greatly flattening below
the ♀ for hatching, it shoots out tentacles
as well as as to be much higher than
the which it cuts off the
water and this causes the egg to roll back

Aug 16 1943 13 1/2

2

The basis of government after July 1st, and
instead of five] (articles, instead of 12)
Houses of Parliament of which
by law, all agreed on crucial questions,
and various joint

now

~~and~~ will bring along as it often

A faint, handwritten note in pencil on a light background. The text appears to be "B. 1960" followed by some illegible characters.

and related books
when writing notes

by the fact that, outside Australia, no species
of this hatching (± 3 years) occurs outside the
Tethys (Hedgpeth, 1960).

Sept. 4 2-4, 11 p.m. to the bottom

10 miles west of town, 6-10 miles west of town

seen no distinct wake. (2) amplitude = 3.0°, frequency = 6.0 Hz, - specimen 1000 m.

by the author, based on the
old Indian name.

superior glacial epoch. The ice sheet covered most of the Great Lakes.

water from the stream which
flows among the rocks.

of granular. Under glass the surface is an irregular pockmarked uneven layer of the surface, but will at all point feel it as being not quite so smooth. It feels rough with black spots about .01-.02" ^(calc 35)
The distinct dark - blackish, level white areas (prob. eatable) giving some relief. Some small 240' N. of my old 1/4 mile west than house and a white band along ① 6-10 ft apart from white base yellowish green, length 1.7-2 mm. suspended just below sand above and across the (Foothills line along 8th ridge is covered by black dots inwardly and a black line outwardly on 6-10 ft. It has become mixed with blackish fine granular dots, brownish and tan following.
Diff July 27 A faint pale peach, thin line of yellow with black spots; a band of sand dark along 6-10 ft and below a curved black line which is faintly intersected by the lines on 6-7 and 9-10 ft. At these lines are several small, 2 transverse furrows with blackish dashes between them - the back of a small part of a shell. On band, & just ipo + and 12 & 13 feet, are sand. The

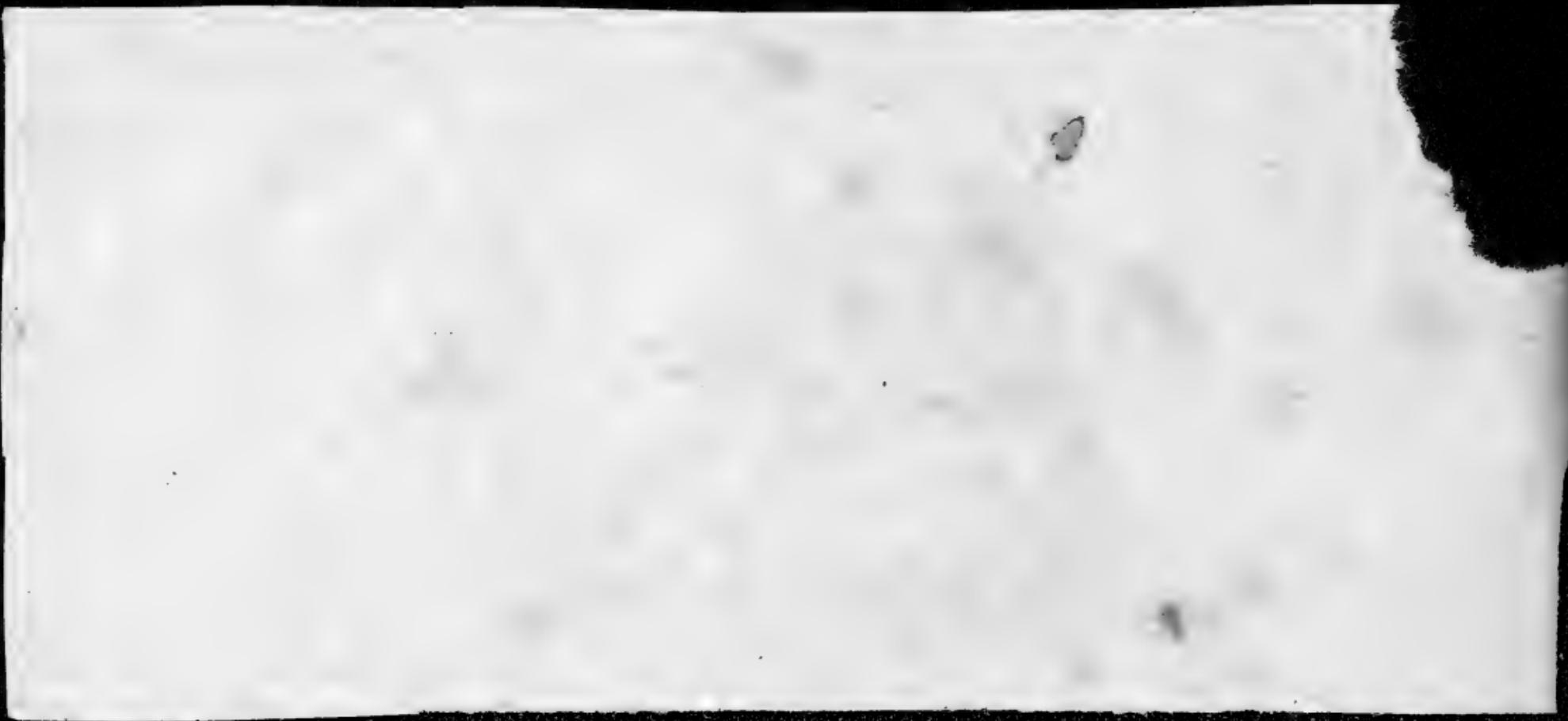
newly hatched or hatched Aug 10 - 11, 1895. Length 24
length 24, width 11 mm. Total length 31.5 mm. Total width
of wings 21 mm. See ~~1895~~ 1896 from 1895.

Vertically or 6/10 and as very faint on it.
On 3-5 they are connected by a short
black line between the bases. Then faintly
granular ~~uniform~~, a very light uniform
in places corresponding to the usual repeat.
area, especially in the white segmental adductor area
area, but very obscured so and the areas are
practically absent. Length after stretching 2.2
width add. 5 mm. (width of neck 6 - 546)

Length 3 mm. July 30 - 05 probably, a lesser, or
3 p.m. - 1/2 yellowish. Black are more evident
now than on day before to white. It appears
as simple like 5% but no black, which I d
own before was less than 1/2, I am
showing a portion. I have not been in touch
with 446 and have one in black.

(1) on back black. Length 0.3 + 4 = 5, 5 = 8, 11 = 5, 12 = 3
13 = 5, 14 = 5, 15 = 5, 16 = 5, 17 = 5, 18 = 5
19 = 5, 20 = 5, 21 = 5, 22 = 5, 23 = 5, 24 = 5, 25 = 5, 26 = 5, 27 = 5, 28 = 5, 29 = 5, 30 = 5, 31 = 5, 32 = 5, 33 = 5, 34 = 5, 35 = 5, 36 = 5, 37 = 5, 38 = 5, 39 = 5, 40 = 5, 41 = 5, 42 = 5, 43 = 5, 44 = 5, 45 = 5, 46 = 5, 47 = 5, 48 = 5, 49 = 5, 50 = 5, 51 = 5, 52 = 5, 53 = 5, 54 = 5, 55 = 5, 56 = 5, 57 = 5, 58 = 5, 59 = 5, 60 = 5, 61 = 5, 62 = 5, 63 = 5, 64 = 5, 65 = 5, 66 = 5, 67 = 5, 68 = 5, 69 = 5, 70 = 5, 71 = 5, 72 = 5, 73 = 5, 74 = 5, 75 = 5, 76 = 5, 77 = 5, 78 = 5, 79 = 5, 80 = 5, 81 = 5, 82 = 5, 83 = 5, 84 = 5, 85 = 5, 86 = 5, 87 = 5, 88 = 5, 89 = 5, 90 = 5, 91 = 5, 92 = 5, 93 = 5, 94 = 5, 95 = 5, 96 = 5, 97 = 5, 98 = 5, 99 = 5, 100 = 5, 101 = 5, 102 = 5, 103 = 5, 104 = 5, 105 = 5, 106 = 5, 107 = 5, 108 = 5, 109 = 5, 110 = 5, 111 = 5, 112 = 5, 113 = 5, 114 = 5, 115 = 5, 116 = 5, 117 = 5, 118 = 5, 119 = 5, 120 = 5, 121 = 5, 122 = 5, 123 = 5, 124 = 5, 125 = 5, 126 = 5, 127 = 5, 128 = 5, 129 = 5, 130 = 5, 131 = 5, 132 = 5, 133 = 5, 134 = 5, 135 = 5, 136 = 5, 137 = 5, 138 = 5, 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Red mottling 2E < 10



My stuff kept from last year. Well 6 + 1945. 1 or 2
more. All 7 mm. ~~July 16~~ ~~July 24~~
length 10 mm. body 4.1 mm; 2.28 14.5 mm; 2.75 7.5 mm; 2.8 1
each tip = all down ant. see 546 200 15 mm Sept 12 17 mm 28.

Certrally on 6/10 and are very faint on 11.

On 3-5 they are connected by a short wavy black line between the horns. Then finely granular, wavy, a very light color in places, running along the vertical bands. Adversely. (oblique), parallel, the bands being especially in the intersegmental areas flattened near top and bottom well over but very sharp on sides and the areas are rounded, a little elongated in median. Not perfectly clear. July 24 after breaking - 2.2 width 4.5 mm (length will be - 506)

Length 3 mm July 16 (D5) granular, wavy, on 3-5 and 12 granular. Black as nose white, & posterior in front back to white so appear. 11-12 wavy like 5-6 but no black, which is a very little longer than 5-6, 3 mm. However a post dorsal line was known in back as 546 but none on my black.

(my) anterior tail, length 10 3 = 4, 4 = 5, 5 = 8, 11 = 5, 12 = 3
13 = 5, 14 = 5, 15 = 5, 16 = 5, 17 = 5, 18 = 5, 19 = 5

Posterior tail 10-12 extremely distinct and dark. The last 10-12 are not black as the first 10, several are black as nose at 11. The next 10 dark brown, marked by 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 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1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091,

concolor tubercles, VI and V on tarsus, tubercles very
sparse hair fine, pale except a few on
the larger tibiae in 3 & 4, 11, 12 which have
blistered with black tubercles. Length 1.5m

544

(22) Egg-like Motovation or Pteris Japonica
Lifschitz, N.H. June 26, 1895 - Considered, low
flat, apex also a little flattened; white, smooth,
slimy, opaque 1 x .75 high. Petiole thin, neck
narrow, not high. Base obscure irregularly
broadened, the areas between finely dotted.
petiole yellowish white, with a dark
black, 6 stripes, beyond them, at junction
made a band on it, by white, thin black
Csh a narrow transverse line with a black
dot. On all white, thick, with small, but
irregular, button-like slugs black, the color passing
over into white. Egg somewhat rounded, pale
white, translucent. Staff several ft. in air visible
S-V. Number of slugs. But the 3d spot on
them comes along the one before slugs are
gradually separated from each other. 20 cm before
shoulder. 4 on each. On 3-4 mm apart (I) but 11
to 12 mm distance on 3, and very 10-11. Total 53
most yellow, big covered body with 4 off
about 20 cm from distal tip of tarsus.

in about 10 days were now in imbricated annulus. On back no primary color. Head conical pale yellowish, back shiny black, & the very narrow, well apart and wide, black, ventral darker but no dorsal.

Molt May 3 (hd. 1) Head round, round above and dark chocolate brown. Body greenish white, lower, dark greenish grey to dorsal again darker shade than rest. Off excepted at ^{at first edge} the narrow transverse black line, in width of body. Throat and neck pale brown.

Later a reddish band on first part of body.
Molt May 4 (hd. 12) All green in a bit faded pinkish white, reddish streaked, and a bit white and blue. Barely faint yellow, like pale green but the minute puncta dark brown a blue tint, very pale, a little pinkish tint. On nose, back with blackish spots, streaked, also on posterior lobes, back mostly pale grey but a

Molt May 21 (hd. 2.0) Head large, rounded, many granules on fin, dark

brown fading into a pale reddish tan over the center of the lobes, black in the sinistral and post. edge except rect. w. 3.2 ± 3.6 narrow transverse, pale tubercles, a black peri-anal band with small marks, about a little, grey ventrally, of usual Hesperid shape, faint white band from pectoral ext. to pectoral fin round anal sinus. Color reddish yellowish with, instead of the white flesh tubercles of the standard median file, a dark brownish d. and lateral line with base of anal in shades and spots legs, indistinctly 7+ annular, each divided with fine red, but faint on first part. No pectoral a small white patch ventrally on 1/3 to 1/2 the latter bisected - on rest side of ray.

At sparingly till Sept 21, then few a few hairs in rays & then at 26 sick Sept 22 fall from rather sharp & typical but thin slowly when handled

545

large oval blocks lower in the mts., Jeff H. Eg. of Silene stellata from Mt. Apo, July 1895. Growth about a my above a number of black water holes, mixed with range in a t. line 15 feet above, rather dark yellow 1.8 x 1.4 x .17 in a steepish head, base, but pitch 2-4, represented by a pool in its posterior part. Small and nearly oblate on the ground, some oval and some oval black, very little under 2 or 4 mm. Length about 40 mm. The orange dot in central shield not. The green margin more uniform than "scapha" and even orange in the anterior head. Found with some old step pots.

546 = 249

¹¹
July 8, 1895. Elliptical, very flat laid in the interceted mass with rounded apically broad in proportion to much thin "scapha" Reticulation scarcely discernible, round, several small angular, obscure, linear, irregular. The surface is much more uniform than "scapha" Stage III from Min. Water July 8) Elliptical, round, higher through 4-5, dimin. post. Ridge and sharp, and rounded. It is pinnaceous like by four 3, 4, 5 and 11, 12 long, entire finely serrated; 7 to 9 cm. short, a width wider 6-8 spines. 13 short spines; a few ^{old} fine on 6 and 10 or but a trace of 10-2 setae. St. thick now 3-13, now 10-15, wider in, divided, equal those in 3-4 larger especially the margin, others only a few spine below the 8d and 3-4 very coarse ridges. Setae crenulated with minute apical processes, small, with close setulation on the basal ones taken

* See the last page of this volume for the names
and ages of children.

slimy skin spars. color light green, the bars transverse white except 3d on 4 which has a faint wavy tint, on 5 black purple wavy and on 11 pale purple and several black bars along sd ridge, the bars rounded of shades black over the dorsum in 3-5 & 11 about 2 per seg. leaving spaces or rounded patches of green color between the pairs of bars, the on 5 to species name V. (5d) and later on 6 & 10 and on 7-9 indeed showing a white bar. The d space here filled with white, a blackish shade which is over some patches 12-13 and lateral regions immaculate. In 7-9, wh. 5-12 bars with bar with 3 green, i.e. black, bars before being sharply pointed, the tip is soft white faceted — — — — — luteo d. region very

opposite them 5-8,000' and between them for how
you sleep out between the trees and blankets
and pad (i.e. in 5-6 and 10-11) also in what
is the best way to sleep in the cold. Are you never
in 32° or below? How do you stand up in such weather?

April 8, 1911. This vehicle I think made up of small sand @ on 6 and 10 M.X. small & close to the large horns on 5 and 11 respectively.

[This from Mr. Norton see p. 20, Hds. 5 and 2 others described by Dr. Kuntze fig. 2, 4, 5, etc., also probably. This was different from my No. 1 above now described, & has distinct carmine spots with blackish centers. 3-4 lvs. ① - ② pale pink like 5 and 11 purple, 12 yellowish, the rest very colorless. ③ (or 6-10) petioles of oblique (reflexed or) bent setaceous leaflets
② 5-12 mm. long. 8-10 petioles of 3-5 cm. lvs. 11 purple except the small pale pink petioles which have a small black spot with an undivided median yellow oval one on 5 and 11. ③ Blackish or 7-9' blackish, a white side under a wavy blade lined by green greenish yellow d. on 5-6 and 10-11. Petiole 1-2' white, h. 6 mm. white oval spots between holes. ④ in 11 & 12. ⑤ in 13 long small 3-bladed dissected min. oval shape granular, with lower edge cleft into short blunt and round lobules like teeth. Stomach surface with numerous fine dots white. The impressed areas are brownish, a brownish flat alternating with rows of dark brownish granules like small dots. Dark red with all edges & the midrib complete blackish. (See fig. 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 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1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416

Wolt July 29 the same, and take picture; tail brown
① in 6-11 stalks around, undivided and above
no!! in sun. didn't molt because Wolt July 30 after
by ticks and charged. Horns black tint the tips
much larger, C in 6-10 very much smaller.
Skin densely covered with short spines, coarse &
gravelly & pointed down, on the long hairs being
considerably elongated & pointed. D (abt.) uniform
new short spines & the old & small
pale ones with points bright seen in the
water. Spine smooth, very strong,
either you take with one or separated
a few long ones in ① 6-10. So much hair
over the horns (undivided) hair very
3-4 flock each & 2-3 dark wings down

July 20
1912

hair color varying 3-5% to ① and 11% to 12% below ① when a band of patch with 7% color all around with white and along middle side by black line, then white & black with repeated as 6 esp separated from each other 1/2 yellow spot on 5 & 11 a band of 1/2 yellow 12 with a white oval 3d patch 10% and the ② bright yellow 5-6%, ③ and various shades of colored 10% - 11% and 12% and 13% indicated when over small with very distinct 1/2 yellow 10% and 1.3% 11% and 12% colored like ② above, but 10% 3-4%, 11% 3.5, 12% 2.3, 13% 1.1% 14% 3-4, red about 1% 15% 2-3% brown 16% 10%. Colored hair and some white hair, no white hair above ③ or 4, white hair below ③ and 10% yellow hair above ④, white hair below ④ and 10% yellow hair above ⑤, white hair below ⑤ and 10% yellow hair above ⑥, white hair below ⑥ and 10% yellow hair above ⑦, white hair below ⑦ and 10% yellow hair above ⑧, white hair below ⑧ and 10% yellow hair above ⑨, white hair below ⑨ and 10% yellow hair above ⑩, white hair below ⑩ and 10% yellow hair above ⑪, white hair below ⑪ and 10% yellow hair above ⑫, white hair below ⑫ and 10% yellow hair above ⑬, white hair below ⑬ and 10% yellow hair above ⑭, white hair below ⑭ and 10% yellow hair above ⑮, white hair below ⑮ and 10% yellow hair above ⑯, white hair below ⑯ and 10% yellow hair above ⑰, white hair below ⑰ and 10% yellow hair above ⑱, white hair below ⑱ and 10% yellow hair above ⑲, white hair below ⑲ and 10% yellow hair above ⑳, white hair below ⑳ and 10% yellow hair above ⑳.

546 cont'd
black, and partially within this white hair was the white, namely in a solid dash in 6 and 12 and a dusky band along ② central elongated pale cream brown beneath at the edge, mixed with yellow 1/2 yellow spot on 5 & 11 a band of 1/2 yellow 12 with a white oval 3d patch 10% and the ② bright yellow 5-6%, ③ and various shades of colored 10% - 11% and 12% and 13% indicated when over small with very distinct 1/2 yellow 10% and 1.3% 11% and 12% colored like ② above, but 10% 3-4%, 11% 3.5, 12% 2.3, 13% 1.1% 14% 3-4, red about 1% 15% 2-3% brown 16% 10%. Colored hair and some white hair, no white hair above ③ or 4, white hair below ③ and 10% yellow hair above ④, white hair below ④ and 10% yellow hair above ⑤, white hair below ⑤ and 10% yellow hair above ⑥, white hair below ⑥ and 10% yellow hair above ⑦, white hair below ⑦ and 10% yellow hair above ⑧, white hair below ⑧ and 10% yellow hair above ⑨, white hair below ⑨ and 10% yellow hair above ⑩, white hair below ⑩ and 10% yellow hair above ⑪, white hair below ⑪ and 10% yellow hair above ⑫, white hair below ⑫ and 10% yellow hair above ⑬, white hair below ⑬ and 10% yellow hair above ⑭, white hair below ⑭ and 10% yellow hair above ⑮, white hair below ⑮ and 10% yellow hair above ⑯, white hair below ⑯ and 10% yellow hair above ⑰, white hair below ⑰ and 10% yellow hair above ⑱, white hair below ⑱ and 10% yellow hair above ⑲, white hair below ⑲ and 10% yellow hair above ⑳, white hair below ⑳ and 10% yellow hair above ⑳.

546 VIII still checked Aug 24 AM.
62 hair of ② above on 12 and above ③ on 13 also at base and covering between the bases ① on 11 and 12 on account of their position in shape of horse tuffe word more rolling with hairs spreading without.

~~wolf~~ Aug 24 about 10 AM. At edge of 2 with yellow at base, also yellow spine like 6-8, a yellow area with a yellow hair strand on its anterior border, square bent the end corner cut off, 2 rows under set closely 3.0 mm. yellow greenish, eye black, skin brown, and 3 pointed long tipped by a hair, a fold

over this on 11 and 12 and 13 and 14 and 15 and 16 and 17 and 18 and 19 and 20 and 21 and 22 and 23 and 24 and 25 and 26 and 27 and 28 and 29 and 30 and 31 and 32 and 33 and 34 and 35 and 36 and 37 and 38 and 39 and 40 and 41 and 42 and 43 and 44 and 45 and 46 and 47 and 48 and 49 and 50 and 51 and 52 and 53 and 54 and 55 and 56 and 57 and 58 and 59 and 60 and 61 and 62 and 63 and 64 and 65 and 66 and 67 and 68 and 69 and 70 and 71 and 72 and 73 and 74 and 75 and 76 and 77 and 78 and 79 and 80 and 81 and 82 and 83 and 84 and 85 and 86 and 87 and 88 and 89 and 90 and 91 and 92 and 93 and 94 and 95 and 96 and 97 and 98 and 99 and 100 and 101 and 102 and 103 and 104 and 105 and 106 and 107 and 108 and 109 and 110 and 111 and 112 and 113 and 114 and 115 and 116 and 117 and 118 and 119 and 120 and 121 and 122 and 123 and 124 and 125 and 126 and 127 and 128 and 129 and 130 and 131 and 132 and 133 and 134 and 135 and 136 and 137 and 138 and 139 and 140 and 141 and 142 and 143 and 144 and 145 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1016 and 1017 and 1018 and 1019 and 1020 and 1021 and 1022 and 1023 and

Length
 date mm
 Aug 25 19
 " 26 21
 " 27 20.5
 " 28 23
 " 29 22
 " 30 22.7 bone 3.5

Sept 1 19 seem stopped eating.
 Spent Sept 2-

Cables on
 willow
 buckeye
magnolia

among the detachable spines + 6
 (+ 5) and after

Caltropes present
 in patches on the
 upper side near
 the top often located
 bone 6-11

(+ 5) and after

5/2 stage VII
 or stage XI.5



596 cont

5/4 VI still crowded Aug 24 A.M.
 at base of ② above on 12 and above
 ① on 13 also at base had covering between
 the birds ① on 12 and 13 on account of
 their position in shape of horns often
 wind from swallows - make here
 something written.

~~most Aug 24 about 10 A.M. At~~
~~edge of a willow patch where there's~~
~~very sparse grass & shrubs, a bottom~~
~~area with a few bushes on~~
~~it an even higher, square bank~~
~~the end corners cut off, 2 m. wide.~~
~~He closely 30 m. pale greenish,~~
~~eyebrows fine brown, and 3 joints~~
~~long tipped by a hair, a fold~~

cross bars for 2 oblique from
and come of each back close
apart. Facial purple mixed
with a little purple blotch in
inner pink. Hair 5-V (M+V)
on every joint 3-13 not on 2.

The 2nd small coxales with a
brown colored claw several teeth
on dorsal & palmar sides 5-V.
The latter not differs from the 2
which I call M+V ② represented
of tiny spines on 6-10 as before.
Length 16 mm ④ 2.8 mm

Cox colored in general as before
but 5-V is brown purple and
the color surrounds 5d white on

11-12 hence your color is purple
as stated in 249. Hair ④ purple
all shorter than before ② "
3-4 pale union 6-13. At base
② ④ above & at base ④ 13
above (but ④ lies in the line)
an elliptical area .8 x 1.5 mm
covered with closely set brown spines
of a dark reddish brown. These
spines have a pale yellowish
sheath and brown black tip
and are close set spreading and
twisting, covering the surface
divided into 2 or 3 groups, more
nearly simple.

Color more purple than before

Literaturber.

wings and partially within the white area, a
narrow, longitudinal, narrow bar a side, dark
on 6 and 7, and a dusky band along the
central cell back patch. Crimson brown,
darkish at the edge, streaked with white
and on the sides by a narrow crimson brown line.
On 11-12 a pair of diagonal white spots. Wings
6-2, 34, fleshly, broad, 65 and 11, pinkish brown
the rest crimson 65, 3.5 mm long 11, 2 mm. Bill
rounded with tip in d. wavy, the base
larger than the middle, set ridge and pointed
rounded wavy, but forward, set of pale vermilion
speculum very small, like that in *A. d. obscurus*, d. showing
pair of lateral wing rows, the lower and
black and dark purple. No rump patch.
Skin smooth & dry, underparts covered with
pointed conical tubercles, crimson or red in color
with green elongate on the lower (Gular) and
giving a patch of blue over them. The white
spots on the wings are not larger than those on the
rest of the body, but on the outer margin of the 11-12 &
the "elevated transverse" space of the 11-12
and covering back tip of, reddish white patches
colored on the black base and 11. Wing 65 mm
long 3.5 mm broad 4.5 mm. Tarsus 5.5 mm. - Aug 10 14 to 15
and 14.5 mm. toes & tibiae 10 mm. Length 110 to 130 mm
weight 100 gm. - Aug 10 14.5 mm. Tarsus 3.5 mm.

July 12, 1912. - On the way to the lake. 1000' above sea level.
Note this on 12 miles from O'Fallon. Roads are not made. Aug 14 Th. 3.5
miles. 4 miles, with the slide & broken " 15 Th. 4.5
miles. Roads. They are not in use roads at these " 16 10.5 Th.
There are no signs of man's habitation. 17 10.5 Th.
① in 6-11.2 miles represented by 2 places. " 18 10.5 Th.
With road. 2 hours after the slide " 19 10.5 Th.
When 2 hours later place of point 1. 2 hours after the slide
a large bridge slip, which " 20 10.5 Th.
you will see.

coll. 128 .39 .54 74 104 1.44 2.0 net. 72

Prod. 3 .45 * .6 * .8 1.0 1.4 2.0

* from alcohol. I make these 4- and 5 fold. They are very small.

$$547 = 210$$

Specimen of *Apteronotus macrourus* from Miss Weston in gray I partially cleaned off tail, the dorsal rays pointed, causing a secondary tubercular elevation, causing the dorsal to form a furrow and lateral to be concave; ends square, subtruncate, skin perfectly smooth, shiny, no granules, few bold spots represented by a series of large suprumentary spines, or at least mostly becoming so and not but the bases kept smooth. The spines have a small basal tubercular projection about the middle and can be traced deep into the skin, however get very much shortened shorter & without projection in tail.



which, it grows from the first, 5th spine dark, blackish, the rest pale. Length 1.5 mm. rounded. 3 mm. bone black all over ^{not as thick} 4.2 with 2. 8d ridge looks whitish ^{not as thick}. Open mouth opens into small skin pouches which bear short ^{thin} setae, also some short setae from the tubercles which consist of 2 sets the whole length of 2 ridges; between them are not many short setae. Largest ridge on each side beyond the edge which bears 2 tubercles. A pair of well defined depressions ^(intense?) a ^(eg.) large one extending into a small odd the tubercles on the rounder bottomed sides a single row of well developed ones, the spine 2^d to last (with others) run of other than 5 or 6 fully rounded, not setiform. There a lateral sete mostly as found, pinkish which have more wrinkles in having 2 sets while large 1st & 2^d instead of 2, on 3 and 13. May a long last sete, and 1st before a very large from the second one.

Leptothrix Linn.
var. *lanceolata* (Linn.)

Pectinate pointed, very 2^d a little broader at tip. Green, a broken white stripe along 3^d ridge (still wider 3^d-4^d) from the apex to the 1st margin of the leaf, but not with any prominent. All the lower leaves have this, all the upper leaves have it only on a few, but stay longer. Tip of 3^d as above, green, but a pale yellow or tan under the glabrous midrib. 2^d clear, well defined, the colorless tip with many short secondary setae with the dotted ridge, the lateral ones defined as if in central and upper rows the bristles do not run out anteriorly. 3^d like 2^d but rounded, not sharp like the dorsal in the secondary trichia above them. One or two large ones with 2 setae (1 and one) and several small setae as before. Length 2-3.8 mm. Seven segments between the apical 3^d and 4^d. Not the same as in *lanceolata* (Linn.) but close to it. Body green, but not bright, dull green, with a few dark brownish brownish hairs. They are not numerous, though. A little of them are on the midrib, some on the 2^d and 3^d ridges, some on the 4^d and 5^d ridges, some on the 6^d and 7^d ridges, some on the 8^d and 9^d ridges, some on the 10^d and 11^d ridges, some on the 12^d and 13^d ridges, some on the 14^d and 15^d ridges, some on the 16^d and 17^d ridges, some on the 18^d and 19^d ridges, some on the 20^d and 21^d ridges, some on the 22^d and 23^d ridges, some on the 24^d and 25^d ridges, some on the 26^d and 27^d ridges, some on the 28^d and 29^d ridges, some on the 30^d and 31^d ridges, some on the 32^d and 33^d ridges, some on the 34^d and 35^d ridges, some on the 36^d and 37^d ridges, some on the 38^d and 39^d ridges, some on the 40^d and 41^d ridges, some on the 42^d and 43^d ridges, some on the 44^d and 45^d ridges, some on the 46^d and 47^d ridges, some on the 48^d and 49^d ridges, some on the 50^d and 51^d ridges, some on the 52^d and 53^d ridges, some on the 54^d and 55^d ridges, some on the 56^d and 57^d ridges, some on the 58^d and 59^d ridges, some on the 60^d and 61^d ridges, some on the 62^d and 63^d ridges, some on the 64^d and 65^d ridges, some on the 66^d and 67^d ridges, some on the 68^d and 69^d ridges, some on the 70^d and 71^d ridges, some on the 72^d and 73^d ridges, some on the 74^d and 75^d ridges, some on the 76^d and 77^d ridges, some on the 78^d and 79^d ridges, some on the 80^d and 81^d ridges, some on the 82^d and 83^d ridges, some on the 84^d and 85^d ridges, some on the 86^d and 87^d ridges, some on the 88^d and 89^d ridges, some on the 90^d and 91^d ridges, some on the 92^d and 93^d ridges, some on the 94^d and 95^d ridges, some on the 96^d and 97^d ridges, some on the 98^d and 99^d ridges, some on the 100^d and 101^d ridges, some on the 102^d and 103^d ridges, some on the 104^d and 105^d ridges, some on the 106^d and 107^d ridges, some on the 108^d and 109^d ridges, some on the 110^d and 111^d ridges, some on the 112^d and 113^d ridges, some on the 114^d and 115^d ridges, some on the 116^d and 117^d ridges, some on the 118^d and 119^d ridges, some on the 120^d and 121^d ridges, some on the 122^d and 123^d ridges, some on the 124^d and 125^d ridges, some on the 126^d and 127^d ridges, some on the 128^d and 129^d ridges, some on the 130^d and 131^d ridges, some on the 132^d and 133^d ridges, some on the 134^d and 135^d ridges, some on the 136^d and 137^d ridges, some on the 138^d and 139^d ridges, some on the 140^d and 141^d ridges, some on the 142^d and 143^d ridges, some on the 144^d and 145^d ridges, some on the 146^d and 147^d ridges, some on the 148^d and 149^d ridges, some on the 150^d and 151^d ridges, some on the 152^d and 153^d ridges, some on the 154^d and 155^d ridges, some on the 156^d and 157^d ridges, some on the 158^d and 159^d ridges, some on the 160^d and 161^d ridges, some on the 162^d and 163^d ridges, some on the 164^d and 165^d ridges, some on the 166^d and 167^d ridges, some on the 168^d and 169^d ridges, some on the 170^d and 171^d ridges, some on 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Some of old contributions to the
Chamber of Commerce

卷之三

Native form. Mr. E. L. Bunting, Paris

526

264

54

Weymouth Ma. Oct 20, 1899
Age of 195 - Hd 125+
Sp. on D & G. - Chinned &
breast white, rest of body
brownish grey, with a
large central brown patch
extending from the neck
to breast 1-1/2" wide.
The wings and tail brownish
grey with a large central
white patch. Feathers
long 2-3 times. Total
length 16 in. Sp. Hd 24. Hd
brownish grey with a large
central brown patch
extending from the neck
to breast 1-1/2" wide.

Acromycta on *oleander* July 14th 1895 W.H.
 July 9 1895 Hd 2.5 I. very well white -
 left on & a faint band dotted in place, after
 1st pale brown. Not green, a yellowish
 & has enlarged to a patch at 2/3 and
 now centered, white from old dots 8-11
 next small 1-11 yellow, the next band
 is 3-4 & red line instead of d. Hair very
 few dark d. pale gray with a few black
 lines 2° red above. Feet green.

July 16 Hd 3.71 (Shd 2.4) Hd green below
 fuscous above with a white band
 1st pale gray with a short space
 2nd begin with the 1° edge a series of
 small blackish whitened by little white
 spaces. Smaller below and not a pale band

Body well olivaceous green from minute
brown-black skin tufts on green ground. No
marks on spec. except a tiny trace of pale
d. line 5 & 12 a little enlarged, 12 & vent
small grey hair, 13 black dot with pale
tuft under the other parts pale greenish. Vents
all pale & 13 very small. Hair short, black
& white 2 & both greenish only 5 & 9 black with
a broad 7 there, pale 6 & few 2 & hair laterally
of plates, comprising olivaceous

yellow brown black & a olivaceous from the
black & yellow 5 & 13 white tufts, others
black. The white spots scattered 2 & 10
white others brown & the pale 11 contrasted
no marks.

Evidently = Velutina Riley Blair.

Aeromachus pallidostictus, Gurnell fed 29. Standard green, with yellow
and yellow hair bands broken, mainly so on throat, all light
yellow. D. in 5, 8, 9, 11 faint 12 ~~white~~ white patches surrounded
with yellow especially at sides. Hair dark. 11 Cuv.
9 olivaceous. 8 & 12 slightly enlarged d. Hd. 1.35
~~most~~ Hd green, posterior part is over hobs, often pale
brown. Red green wants ad fin yellow, yellow elliptical
patch in in 8 & 9 12 with red center; a red dot on 11
want ad brown a trace on 3-4. Hd. 2.2 Skin greenish gray
with short pale in a few tiny whorls. Hair sparse wif
a few fine. want (ug) 518 a little enlarged d, brown dots on
yellow d line on 4 & 7 small 8 & larger 10, 11 more & brown
enlarged to enclose i in 8 & 9, & ii on 5 and 12. Red green want
small yellow, d. hair 4-12 thin & ad a 2-3 (probably - 549)
~~most~~ Hd pale black mostly, often except; 10, 11 brown
11 black red pale, a pale d line, 5 & 6 a little yellow
pink. Hair short coarse, pale brown standard 5-7
- petulac Empty & Aug 12 P.M.

538

Leaves of Urtica canaliculata from
Chapman's atypic I

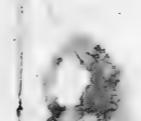
444

445

304



549



Native of in Mr. E. L. Brainerd's Park

Egg of Lycosa cylindrocephala from Dr. G. R. Price from Mt. Baldy, Calif., 4.5 mm. and 2 mm. wide perfect. Elipsoid, elongate, flattened with rounded base and a band of hair on back. Above and below, 1.2 x 6 x 5, light yellow with a few black spots and some very slight shiny surface roughness with multiple minute hairs. Back with very slight pectinate spines near base. Body uniform pale yellowish. White markings numerous. All brown, white and yellowish without papillae. Head 6 or 7 mm. (8840.65.) Hatched July 29 yellowish brown of the egg, molt! Molt Aug 12, the legs - the hair being all white - 1. Half length of body - ovoid. Body immediately as before. A white hair ring less than black tipped spine around. No other markings. Hair short fine a few from short brown from 5-6 regions. Length 10 mm. Molt 13. (3) molt for 3rd instar a day; 2 or 3 a little worn molt. Apparently 1st instar. 2. Hair long and not from 5-6 fold and a cluster of hairs, very spreading fastening round with short stiff hairs on D. Most apparent distinctive hairs - procurved or pointed. evident, no hair on H. (Stiff rough) very thin. Separation from 1st instar by slight appearance of a small, thin, brown, hair, 10 mm. Hair thin and fine like a wire.

Molt Aug 3 Hair brown
with some black mixed in.

Molt Aug 12 The legs - the hair being all white - 1. Half length of body - ovoid. Body immediately as before. A white hair ring less than black tipped spine around. No other markings. Hair short fine a few from short brown from 5-6 regions. Length 10 mm. Molt 13. (3) molt for 3rd instar a day; 2 or 3 a little worn molt. Apparently 1st instar. 2. Hair long and not from 5-6 fold and a cluster of hairs, very spreading fastening round with short stiff hairs on D. Most apparent distinctive hairs - procurved or pointed. evident, no hair on H. (Stiff rough) very thin. Separation from 1st instar by slight appearance of a small, thin, brown, hair, 10 mm. Hair thin and fine like a wire.

Molt Sept 14 Hd. 2 & same. Length 12-13 mm.

Molt Sept 11 Last stage, hair dark gray. Hd. 2 & 3 light reddish gray; 4

base, body all white; greenish yellow
spots distributed. On the median
laterally is a row of gland like tubules,
a space folded around by the segments
(at blunt corners) Sept 12 18 mm.
from Sept 23

(at no. 11592) plagiata 537

Egg of *Leucaspis heterophaga* = 486-36 micra
by 340, N.H. laid July 6-7. Cylindrical
spherical flattened above and hollowed
in a cup shape at microyle. White with
a pinkish tint at first which disappears
- a dark shade in hollow. W. & height 6
Retinaculum found by the edges of mouth,
shallow depression, vaguely ill defined
difficult to divide by boundaries. At microyle
a single row of narrow pointed wedge
shaped cells. Found in patches of few to 25
surrounded by clear greenish flesh which feels
wet underneath between egg mass to the top
Latched July 21 which appears like *Leucaspis*
Hd and neck black. Body rounded white

Hair strands
set simple rows
from a vent just
but rather long
dark; light mixed whd. 4± 3d on 2 legs.
Dorsal 6-10 much smaller, large ones on 5-8

Lat. a colated patch d on 4 and 7.

Molt July 30 Hd black, body gray and white. Precut, white beneath hairy esp. later where the hair are long & white forming a dense hairy area down surface visible d. hair on 4, 5, 6 & 7; 3-4 & 9 white d esp. of which has a large white spot on II & III. Rest otherwise gray. Hair fine & bristly the long hairs are feathered. A few very long simple black hair post.

Molt Aug 6) Hd shiny black. 5-7, 12 black tufts, no hair long stalk white, with a series of single plumed black colored hairs varying in distribution in different larvae in some very evident. Lg. black, white line. Precut, no 2 & 8 slightly on 15 with precess 10 on 1. Post dark, other hairs gray, some of the others plumed, others white appearing bare esp. Red antennae, faint reddish. A lot white line, black tufts 5-6 black, no hair on 10-11

over on 7-8 gray, no hair on 9. (= 4th inst.) White 3d tarsus 9-10, base of last, 8-9 more short white. Red tuft red. Most majority are within the plumed side tufts.
Molt Aug 13 Cervix longer becoming plumed and hair on the sides distinct; 3 black tufts and no on 2; red tufts red. Side plumes gray (5), 2 on joints 4-8, one from the rest none from (3) (in this example) left 5-6 black 7 post black, 8 no tuft mostly around white like above as in 4th It g.v. Side plumes very short & sparse on two sides of same larva.

One head (L. hair on 5-8 another on 9 single plumed hair from III on 5, none from V (in previous stage now - 3rd inst)

Molt Aug 25 Head black, Hd black, 2 post 3-4 tufts 4-6 black, 6 white (part molt), 10 tufts 7-8 and 11 white length mostly white, 10 short white, white, v.v. very dense feathered white and mostly 3 plumed or black a hair in space around red tuft & tufts. None on a whole row of black plumed hairs on sides Hd.

332

by the id. - anterior-like tubercles on
head called to I., Jefferson Islands, July 28 1955.
Measures in 3 areas (moderately) about same
white with black bars. A single bar
in pair in 2, flexible, white at base
the rest black, hairy, a little club-shaped
spines on bars, often 3-4 on each
and very 2 rows in 3-4. Body dark
purple with a row of red dots from
Gills, a narrow white sash runs along
D. Open bottomed.

May 2 Aug. 9 1996

~~George's Magazine~~

33

near T & by a m. after side of Maple Leaf
f. Highland July 27 1895. A Myotis
Wood whitish mottled with brown dots.

5

553

White Ipotelae on sample belly
18 July 1996

wt. 4.73 oz under side pinkish
yellow. Dark spots get fainter
near edges. Dorsal; pectoral even
more pinkish. Anal pale. Very
pink body below, with large
pink patches in & around
fin bases, body base, around gut
area, on dorsal, the dorsal
ray slightly lower with faint
pink bands. Anal base & vent
a darker color than the fins.
(Dorsal & anal pinkish wash.)

July 28 45.89 1.1 1.76 2.8
wt. 4.7 1.2 1.8 2.8

July 30 45.89 1.1 1.76 2.8
wt. 4.7 1.2 1.8 2.8
dorsal & anal pinkish wash
body base pinkish

egg not very large, white
downy. Head, like bright blue
and white striped wings. A
blue & yellow way of quivering.
was also seen. The
feathers on head brown
with blue. Very pretty in
sunlight. The body is
brownish grey with blue
on neck & breast. It has
a thick blue ring around
the eye. The tail is
watered with white. I saw
one of greenish grey with blue
ring long feathers all the way back
single i-v in posterior side, a brown
animal which has long fluffy white whiskers

11.2 *Wetmorea* sp. n. *sp. n.*
Type locality - Egg Lake
White river, Litchfield, Minnesota.
Established by *Wetmorea* *sp. n.* *sp. n.*

552

In flight with antenna-like tubercles on head with 3 L, prominent black. July 27 1895. Found in 3 rows (anterior) about same white with black bars. A single long bar in 2, flexible, white at base, black, hairy, a little club-shaped, a few on head, with 3-4 rows of small and very narrow 3-4. Body black, polished with a few red dots back. Wings narrow with 5-8 lines along @. Upper button pubescent May 29. 1895.

Agriotes marginatus

553

From 3 style in side of maple leaf July 27 1895. 3 style
however in 3 rows (anterior) about same
white with black bars. A single long
bar in 2, flexible, white at base
black, hairy, a little club-shaped,
a few on head, with 3-4 rows of small
and very narrow 3-4. Body black,
polished with a few red dots back.
Wings narrow with 5-8 lines along
@. Upper button pubescent
May 29. 1895.



July 28 Same Ad 25. The 2nd bands
narrowly from 1st to 10 are black and
have 2 little white dashes, crimson at
the ends. In d-space a round ad H first
black point, edged with crimson, 3rd band
fairly smooth, crimson, but a few hair
fainter than the central one that could

the zone, faint green shading into faded
Hain't it like bush orange, 11-11
long white. Body yellowish green, white
wings 1-11 pale orange, red on edges.
W. Marin. Saw first minute notice
of nest about June 10 and 1 got
flock around her & dark shade covered
her off much 3-4.

Spur left a row of charred logs
was still like its state of burns etc
and was 21' off a desolate Cat no 12750

Scapha from Main River, recd July 29 1891
(below) water surface on foggy day. Egg shell
white, flat 18 x 1.2 in. Main river white
and thin. Scapha eggs from Stell
marsh, off Patcham, July 18 1891
in surface. Brandy white, flat
1.7 x 1.4 x 1 mm.
Egg white, yellowish, pointed at both
ends, giving a pointed conical
shape to the two ends down
the middle, pointed.

and I am perfectly satisfied with our
present condition. The people
here are very friendly and kind.
I have been here about a week
now and I am getting along
well.

81. The angular leaf
of *Ononis* -
the two in 2 line
above below each
other and see what

Scallop shell from Rock
catching net off Fiji,
small delicate shell
7 or 8 mm. in diam.
white with thin
brownish green
mottles brown
color inside,
inner edge
smooth,
outer edge
wavy,
water level

2. The relationship between
local and international
marketing has developed
over time.

the same, faint brown shading in back
red hair 1, II black with orange, III-VI
brown white. Body yellowish warmer white
with I-III pale orange, red on clavus
and behind. Skin points minute reddish
scarce & look large in front w d spots
between base & dark shade center
yellowish IV.

openings a crown of shaved off leaves
and silk like bristles of lime etc
Last May 21 1897 Admire Cat No 12750

Calc
 I 1.2 - 1.7
 II 1.7 - 2.4
 III 2.4 - 3.5
 IV 3.5 - 4.9 554 = 244 = 4.
 True scapha from Miss Morton, recd July 29 1891
 Egg (shell) white on upper surface of cap. Crystal
 white flat, 1.8 x 1.2 in. Other very thin, white
 and irregular. Petiole base rounded, sharp
 scarcely appressed to each other, so soon turn angles
 on the surface a little sharpened, as usual
 Stage Hd. 3 length 1 mm. (red & white characters)
 Dorsal each lower lobe having side 2 at
 (spine on base white remains)
 sides drawn broad & flat. Skin perfectly white



| See sketch |

384 are clearly separated and 13 is divided into
2 caps, or all three 4 tubercles are in 3, 4 like
5 and 13 like 14 more loosely than others. Lateral
lips very narrow at first a short sp.
S. The 4 ^{lips} _{lips} 2.2 and 3.0 & 4 to 5th. 2.2
Shells as before. Lateral

face great
danger, and
at about 8 and 9
met up with

The same ridge, the whole back and
composed of elongated S-V covered with the
ridge (Sd) with broad d- & side spaces.
2 rows of double setae on both sides from the ridge
with additional ones at the ends. Dorsal
and recte smaller in proportion than before
in summer, Roof all black, pointed white
behind front edge, 2 feet, a little wider
side very I. is erect almost square quadrangular
in ventral aspect, d a little darker
but without a broad dark band along upper
side of ridge, covered at ends and also
L. at anterior & posterior angles. Skin smooth
blurred in middle yellow, d. interc. red and
yellow, and on segs. Places of trachea wrinkled
but parallel. Lateral (scr.) skin also
wrinkled with 2 rows of faint depressions the
upper appearing the widest and most prominent
[*]. aspect above upper ridge; last aspect below

Ends well below the ridge, seen by the few
gentler more clean yellowish brown log. At
Step 1d.5 length 2.4 mm cleavage to another
structure. There also absent, a dragon tree
site represents each 1d ridge.

prominent. Dunes followed, sides 1. Sides
observed granular or pebbly-like, the sandy
soil less elevated* between areas vegetated
scrubland, sheep or creased, regular the drift
along the coastal (trees) long, about small
rounded, the latter ridge a very narrow,
almost linear - Areas not much depressed
sides hollowed below the wind breaking ridge
which shows a zig-zag of sand dune areas
a more aspect, of light granular, with the
well drained areas, some larger areas
are post rounded to 60° greenish the ridge
wind blown with character, sand as
at the highest part of dunes (as a trans-
lateral ridge). The back is a with angled at
zig-zag post to the transverse dunes sand higher than
(Elevation 31. From, 2 steps 11, just above, 30° slope south. 1 step 10 m.)
any lower land around with them. Length 2.5 miles 2.5 m.
except on the flats 3.5. 20 feet above the transverse dunes
(Any 4 to 6. 3 m., are still 6 feet; others 2.5 to 4)
Any side has about a low, a depression and a ridge
all the flats are 10 to 15 feet above the sea
3 m. and 2.5 m. The banks are flat topped over
containing a great variety of rock, mostly
soil, especially after the lava is fallen to the
side remains about, with the ground, the
ridge low, mostly it with just rounded
with, irregular, sharp and clean, all that
in the first 100' have low

May 14, went up back side of the
Harrington's, but the stream was not to be
crossed before the ground was dry, so
was forced to camp upstream.

front of head & appears to be lifting
from below where it receives its supply
of scales from under each other & then

the plate can be seen) and you
can well observe, on the lower or abdominal
side a small dorsal, separated just above
the eyes. Noticed first bony plate at about
mid distance from lower side of head

over water ridge from
anterior, all scutella; also
at right neck spine not, dark
yellowish brown, even yellowish red to tail.
Coloration as follows - back, black and 7-8
rows of white, becoming a little perceptible on the side
edge at 7-8, a single bump in this. Length from
head 3.5 the wings, 4.8-5.7 between III & IV the brown
scutellae, a pair of fine convex bony plates and 4
more on the side, as in the figure (length not 4 mm
Aug 9 AM)

Aug 9 AM { 1 3.5
{ 2 3.5
{ 3 3.5
{ 4 4.7

Aug 10 AM { 1 (tail) 3.5
{ 2 (tail) 3.5
{ 3 4.5

Aug 11 AM { 1 4.2
{ 2 4.2
{ 3 4.2
{ 4 4.2

Aug 12 AM { 1 4.5
{ 2 4.5
{ 3 4.5
{ 4 4.5

Aug 13 AM { 1 4.5
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Aug 14 AM { 1 4.5
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Aug 15 AM { 1 4.5
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Aug 16 AM { 1 4.5
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Aug 17 AM { 1 4.5
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Aug 18 AM { 1 4.5
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Aug 19 AM { 1 4.5
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as in young stage. Fins black (except black edge present, very fine). Gills, elongated, broad, slender, edges well scaled. D. plate are divided by a slight longitudinal line. Length on 1-8 g. to well developed tail round pointed. Shape & mouth like *Holothuria*. Body well covered, upper 5-8 dark brown, middle center bright red, yellowish with a few small dark spots. When rearing larva, the pigmentation follows d. leather line and a narrow edge off plate 5 very dark. Hind edge outer margin of plate 6 black. A white spot is always at edge of plate 8 and a little over in plate 7 seen best from side. Sides black, flanks 1 (most) and 3 and dark brown on hind part of body. Glabella center of upper 5-8 dark brown. Edge on ridge from side view a series of dark brown scattered spots which increase in number as the head's hide and in number to form a row of drops of clear fluid tinted with black. These red spots and latter, however, are not visible in young plates 2 and 3 but appear later. At 100 mm. (about 100 g.) D. 46-50 gills also a black band across 2d place in young plates 2 and 3 but disappear later at 17 (about 19). A dark brown white band appears across plate 5. The white spot on 2d and 3d plate? never found later (at 19) seen now at 100 mm. (about 100 g.) same as before in color and shape of body. The 2d and 3d plates are black and white apart (67) and 4th plate greenish gray or 10-11. There are other changes in color and shape as before at 100 mm. (about 100 g.)

Spur Sept 10. Last day smooth but no
differential characters from the previous
ones. Greatest length 8 mm. & 15.1 mm.

561 A? Fiery ellioti
Mariana Islands
July 5 1896 H. S. Hart III?

- Offs 23 with horns, all small
- 16 2.7 " gray with white
- " 7 3.5 " brown yellowish
- " 8 3.2 to 8.0 pale green from foot
- 19 3.0 " ① 3.5 8, 11-12 alike
- " 10 3.9 rat-tail very long with many
- " 11 4.5 " black spine; ② green
- " 12 5.5 " others very small with
- " 13 5.3 black with spine. ③ black and
- " 14 5.5 rat-tail black with pale
- " 15 7.5 " spine. Late life
- " 16 8.0 " brown with yellowish
- " 17 7.5 black spine & 5 up next to none.
- " 18 " " purple, very black
- 19 " " short black hair on back
- 20 7.8 black with long dark spine.
- 21 9 rat-tail colorless whitish.
- 22 10 " 14.5 by 10.5 with long
- 23 9.5 8.5 black spine finely & long along
- 24 " 3.5 spine fine & long along
- 25 " " rat-tail colorless. 10.5 10
- 26 " " all the long hairs pretty
- 27 " 9.5 black from foot, color pale at base

Septicemic very distinct. D.
had a few small, no
perceptible centers. 2 inter-
test. whitish dots like each
found which sd line indi-
cates at base of long wavy
Ht 5+ whitish, by back mouth from
~~SD~~ ¹⁴ 14 jaws, the posterior line
along ridge are red like the fin
mucous. Spine long, black. White
line much continuous. Fin dark
esp. pale glandular dots. Also 6
lateral rays. Skin rather clean,
water granular, the scales very
thin. A few scattered on the
side brown esp. anteriorly. Ht 7+ ~~8~~
+ 6 + 7 + 8 part of last field is
with well defined green & faint red dots
like fine rings around the glandular dots
in the sides. These line along the lower
upper edge & do not cross above spine. ²
Ventr. also with 6 red. White line
over white whitish biggest patches
around glands of dots like d. Spine is
black with blackish green called for
Spine has a rusty edge, and call for
Spine is white, first part the whitish
part is white & call for reddish
Spine is white, first part the whitish
part is white & call for reddish

| | | | | |
|----------------------------------------|------|--------------------------|-------------------------------------|----------------|
| July 27 | 9.5 | wakey | III Fed July 27 | 561 A cont. |
| " 28 | 9.6 | " | | |
| " 29 | 11 | eating | large cat-tails @ ② | |
| " 30 | 10.5 | " | 6-12, some ① ③ | |
| " 31 | 11 | " | Salvin greenish, | |
| Aug 1 | " | " | black lime heavy | |
| " 2 | 11 | dark | and went ^{salvin} bordered | |
| " 3 | " | " | | |
| " 4 | 10 | by 10s with ex tracts, d | | |
| " 5 | 12 | eating lime whitish | | |
| " 6 | 12 | " | ① and both horns | |
| " 8 | 14 | " | | |
| " 9 | 13.5 | shallow dull terra cotta | | |
| " 12 | 14 | eating red, ① overgrown | | |
| [not noted] | | at 4-5, 6-7, 9-10 | | |
| and 11-12 first w/ | | | | |
| broken through, then spots black | | | | |
| as part of the s-d dark lime | | | | |
| shoulder dot white, evident, | | | | |
| no end spines. | | | | |
| <u>shed Aug 4</u> Terra cotta, green & | | | | |
| purple, was drawing | | | | |
| ① in green & lime con- | | | | |
| centaneous. cat-tails @ 6-12 | | | | |
| and ① ③. no end spines | | | | |
| <u>shed Aug 11</u> Repair end spines | | | | |
| in red <u>elliptic</u> form, | | | | |

561 Another a distinct b. setting depress space
between ovaria. A distinct distinct one, including both
but with a long gap between. No other.
On Myrica ciliata Long (shrub) Libo with Mr.

Bentenwilles Aug. 3rd 1895. Very red ones.

Dsp moderately broad even, scarcely narrowing at

ends, lateral space rather wide, oblique

S-v space narrow, contracted. Phacelis = short hairs well developed but not rigid

D about as long as O on average, in P 3, 4, 5.

11,12 about twice as long as 67,910; 3 and

13 intermediate. ② 3-4, 6-12 almost equal

Ü 86(3) 9① now in 5- its original name
is *Leptostylus*

up out of line with the other. Depression very slight but more distinct than Sibiu.

slight mottling distinct near spine. D.
Found 14 slender spots 2 fm frus. 2 fm

met me, showing me on 34 & 5 December

consolidated into a single firm under

in an ill defined border. Abdominal muscles
of the ♀ clearly visible at the bottom.

Lat. 2 glands are of dots (intense) the 2nd
more absent) enclosed in a fil. dot & 2nd

I-V light yellow bellows without distinct

glandulosa centers. The perianths elongated

~~and 0.0001~~. ⑤ & 6 are approximated and

300 00 000 000 13 10 cell larva. Skin coarse
watery granules, not appressed

the Cleveland dots nearly
as good as the others.

*Smooth. Spine short, with
separate tip but not so distinct*

as in Siberia. One setae from a

small pale wart. Ridges uniform ~~are spots~~ ^{and} ~~irregular~~

A year (or two) older than other red Sanderlings. No one else seen.

B 12 man House & droogs staying here waiting
to march on edge of ridge. Rock first column

large irregular areas around glenndele chs

gutted in blackish as also pale blue
greenish grey to white

the areas so large as this are covered by a red, very dry, loamy area, a typical trunk as it

1828 Chester Park Sept. 22nd

One with hair and spines

shed and still had hair

Callidris in ② 12 with spines

Sepia cover brown; primaries ochreous yellow on back & blackish on one of mid toe

more or less distinct brown lines on the back dark bands broad on the wing marks.

1 + 2 distinctly cinnamon colored with mostly tan lines ----- lesser

♀ slightly paler and more tan than ♂ -----

Throat frequently yellowish brown habitat eastern -----

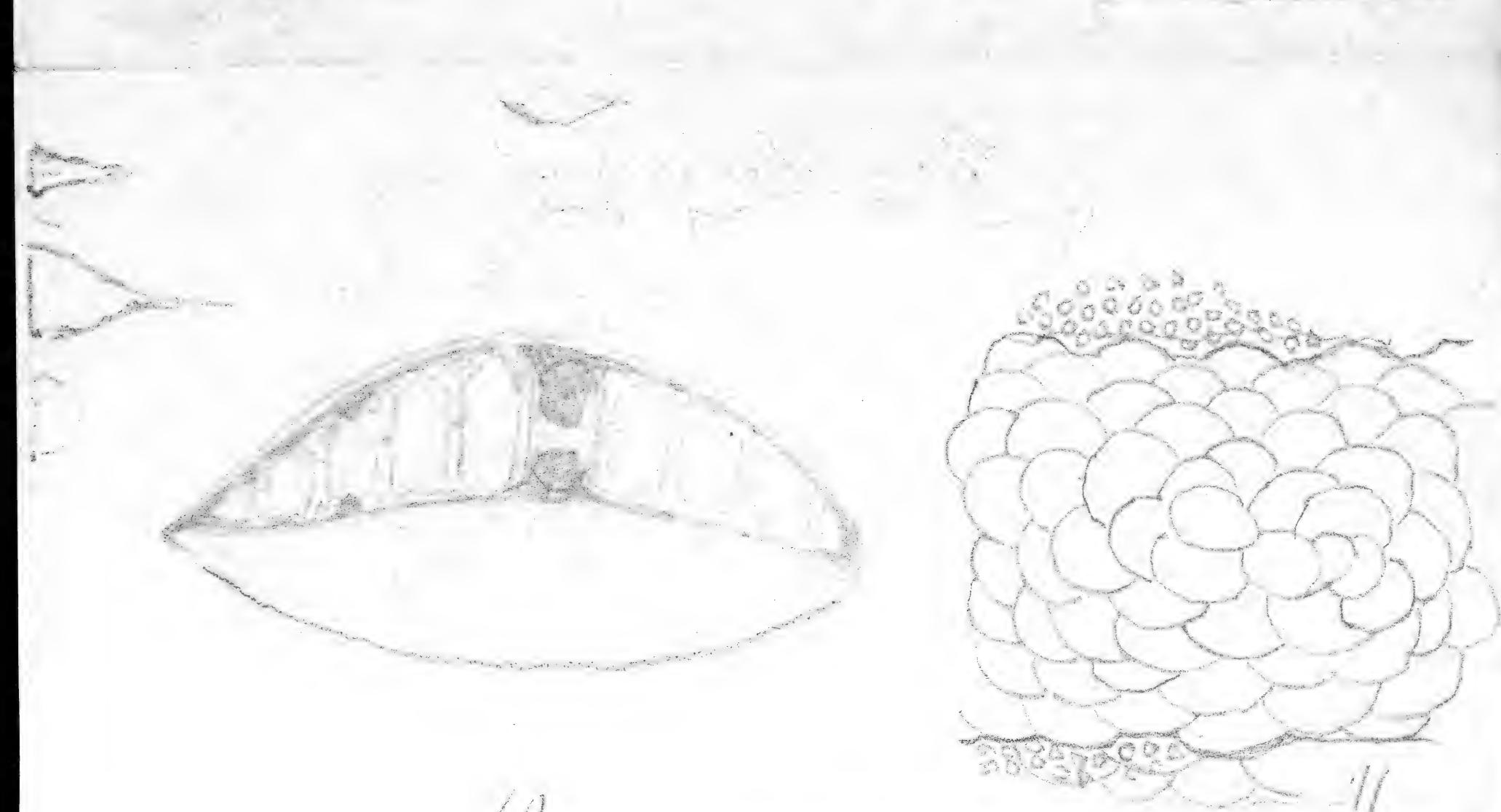
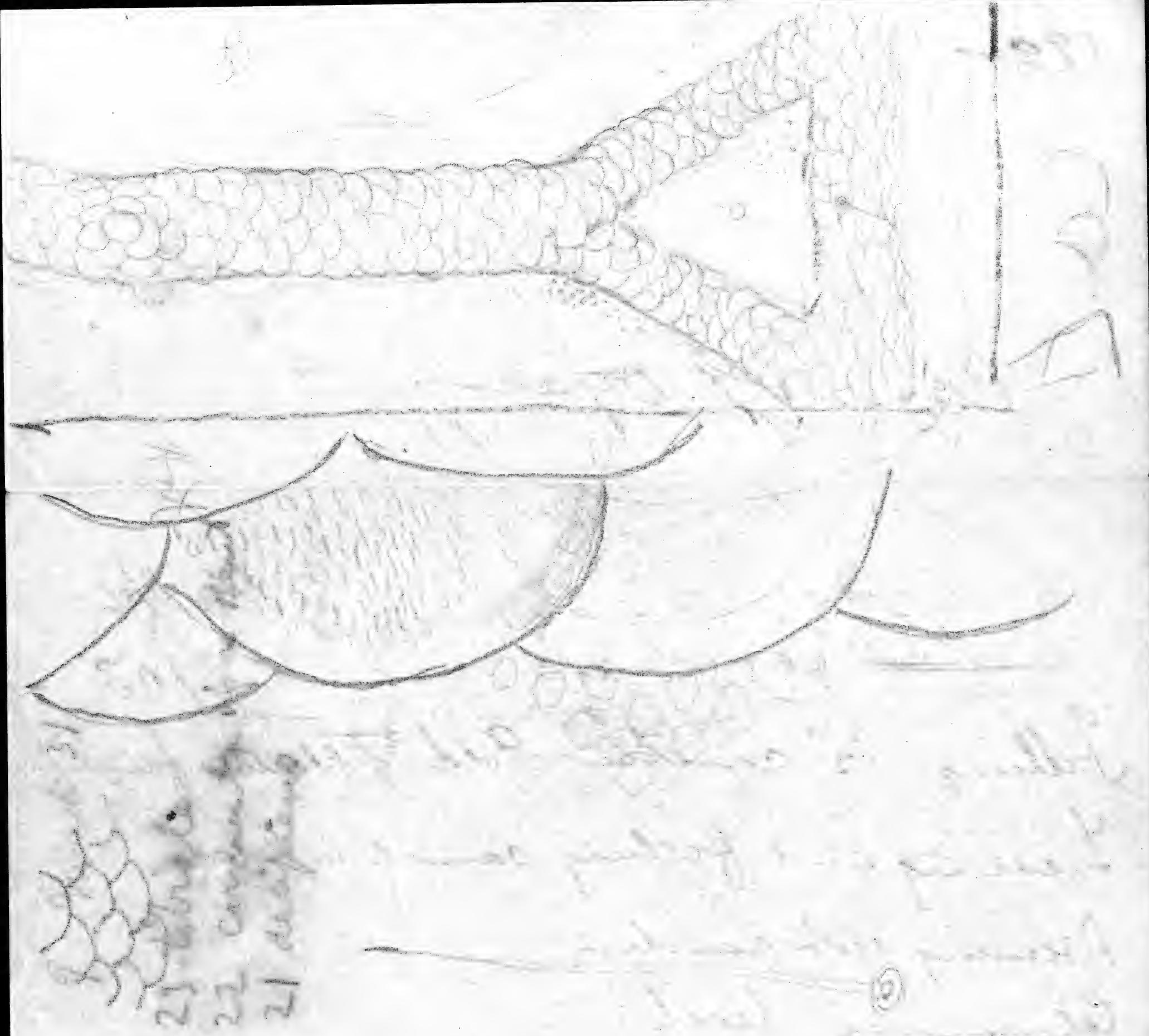
Throat seldom yellowish habitat western -----

lesser

Sepia cover brown, the mainly pale, fore wings covered by tan lines darker than the ground color except where the tail pale

Darker photo later brown, the base nearly white often

| | I | II | III | IV | V | VI | VII | VIII |
|---------------------|----------------|-----|---------|---------|---------|---------|------------|-----------------------|
| Stimulea { | Length Nds. | 1.3 | 17-2 | 22-3 | 3-5.7 | 9-9.5 | 11-13 | 13-18.5 |
| | Wds. | .3 | .4 | .5 | .7 | 1 | 1.4 | 2.1 |
| | calc. | .25 | .35 | .50 | .72 | 1.0 | 1.47 | 2.1 |
| γ -inversa { | Length Nds. | 1.5 | + | 2.5-2.8 | 3.2-4.2 | 5.9-7.9 | 7.5-9.2 | 10.5-13 |
| | Wds. | .3 | .45 | .65 | .75 | 1.0 | | |
| | calc. | 1.3 | 1.9 | 2.8 | 4.2 | 6.5 | 9.7 | 11.2 at .66 |
| scapha { | Length Nds. | 1 | 1.5-2.2 | 2.4-3 | 3.4-4.5 | 4.5-6.6 | 6.5-9.8 | |
| | Wds. | .3 | .4 | .5 | .7 | 1.1 | 1.2 | |
| | calc. | 1.5 | ...-2.2 | - | -3.1 | -4.6 | -6.6 | -9.5 at .20 |
| pyr. Nidus { | Length 209 | 1.5 | | 2.6-2.7 | 4.5 | 5.7-6.5 | 7.5-9.5 | |
| | Wds. | - | | .5 | .85 | 1 | 1.4 | |
| | calc. | .25 | .35 | .5 | .7 | 1.0 | 1.4 | at .20 |
| seminata { | Length | | - | 3.4 | 4.3 | -7 | 7.7-11(14) | [3] 20 |
| | Wds. | | | .5 | .7 | 1 | 1.4 | |
| * 14 | Length | 2.1 | 3.3 | 5.0 | 7.6 | 13. | 20. | 30. ^{at .66} |
| | Wds. | | | | | | | |



10

11

190

47 West 49th Street

New York, March 4, 1896

Mrs H. G. Dyer

To Dr. Arthur R. Gage, Dr.

Dec-95 - Feb. 10/96

For Professional Services.

103

Filling 12 caries. Gold of plasters filling
Treating and filling canal in Molar
Dressing 12 caries
Cleaning teeth

Received Payment.

A. R. Gage,

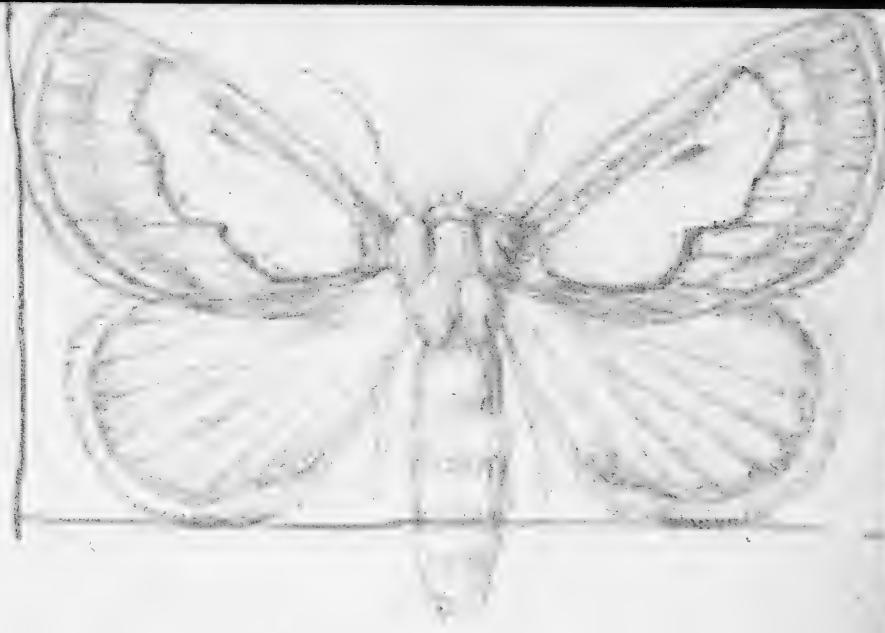
Records for Eustea

1895

Bell showed me about 30+ hu-
res larva, all but 1 had the
single black spot, the one had
both pair.

Moths reared by Anna Norton
from Bell's 1894 larvae, prob-
ably same as above came
out monilis interjecta and
trans. ad. dilatata.

The one of the larva shown &
came out at Newburgh ♀
& the female with large green
patch on ellotii ♀ Miss Norton.
Others came out around or 1896, one
quite reared with ♂ from
Quebec from Newburgh.



MR 3 (turn back)

Aug 27 stage X to head.

~~Aug 27~~ Aug 27 - 1 and

Aug 28 water Aug 28.5

Aug 29 " " 9.6

Aug 30 " " 10.0

Aug 31 " " 10.7

Sept 1 " " 11.5

Sept 2 (to stand) " 10.5

Sept 15 ~~III~~ as Aug 11.5

Sept 16 " " 12.5

Sept 17 " " 13.5

ved payment for JAMES GOR-

Second ocotilla checks 384

of and newly hatched larvae
from Min. Water July 31, 1956
to date have not (July 50), just
hatched had not eaten when
received. Approximate age.

July 31 last Spring with larvae given

Aug 1 1.1 eating

" 2 1.3 "

" 3 1.4 "

" 4 1.7 walking

" 5 " hatched

" 6 1.5 wide gape smooth

" 7 1.2 hatched

" 8 2.6 "

" 9 2.6 hatched

" 10 " "

" 11 2.7 eating

" 12 3.9 "

" 13 3.9 hatched

" 14 4.3 still

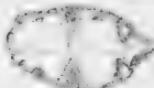
" 15 4.9 eating

" 16 5.5 "

" 17 " "

" 18-19 hatched

Aug 20. 6.5 ride gone



" 21 7.2 eating
" 22 8.5 "
" 23 8.6 to bed
" 24 " "
" 25 8.2 "

" 26 9.8 eating
" 27 10.2 "
" 28 12 "
" 29 11.4 still
" 30 " to bed
" 31 " "

Sept 1 12.7 still²

" 2 13.5 eating
" 3 13.8 "
" 4 14.6 still
" 5 15 eating
" 6 11 "

W 2

Aug 27 stage VI but
not yet big.

Aug 28 9.8 stopped eating?

Aug 29 on back legs

Aug 30 Head to side 9.6

Aug 31 VII 10.6

Sept 1 eating 12.1

" 2 " 12.1

" 3 " 13.1

" 4 " 14.7

" 5 " 14.9

" 6 " 14.5

" 7 " 14.0

Alma & No
Brown

St. Louis
Mo.

15 min
15.1

Mc Clark

in season
at all times
all year round

11 dorsal plates.
3-4 to 1/3 - 1/4



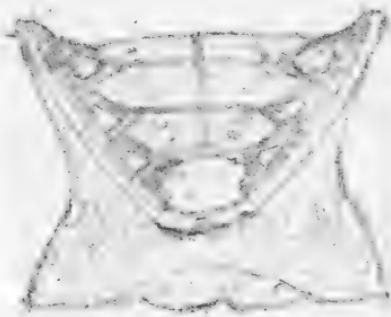
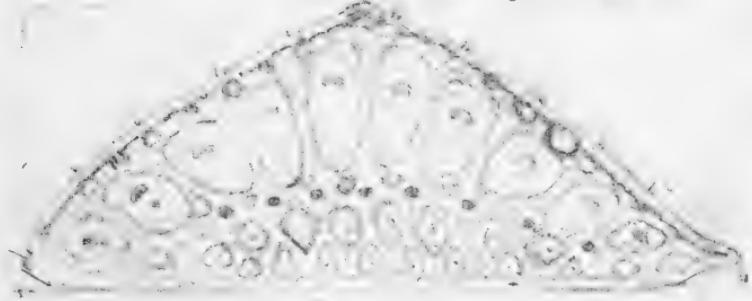
2 humpd scalps in black
one Scarsdale May.
Sept 12 1895 side green,
back yellow in 3' and a
little more brown.





| | | | | |
|--------|------|-------|-------|-----|
| 15 | 4.6 | (4.2) | Aug 9 | 9.2 |
| 16 | 4.9 | (4.5) | 10 | 3.0 |
| Aug 17 | 4.7 | | | |
| 24 | 7.2 | | 11 | 3.4 |
| 25 | 6.6 | | 12 | 3.8 |
| 26 | 5.8 | | 13 | 4.0 |
| 27 | 6.8 | | | |
| 28 | 8.5 | | | |
| 29 | 9.6 | | | |
| 30 | 10 | | | |
| Aug 31 | 10.7 | | | |
| 1 | 11.5 | | | |
| 2 | 12.5 | | | |
| VII | 11.5 | | | |
| 5 | 12.5 | | | |
| 6 | 12.5 | | | |
| 7 | 13.5 | | | |
| 8 | 13.6 | | | |
| 9 | 14 | | | |
| 10 | 14.5 | | | |
| 11 | 15.5 | | | |
| 12 | 15.2 | | | |
| 13 | 15.5 | | | |

Scapha end of stage VI X 5 (mt)



Hickory
Black oak
Maple
Cherry
Pine tree

BALD.

rietary.

: limits) and
ee).

| Three Mos. | One Mo. |
|---------------|------------|
| \$2.50 | \$1.00 |
| 2.00 | .80 |
| .50 | ... |
| .40 | ... |
| .30 | ... |

y editions in
er copy addi-

NON

foreign Coun-
Postal

| Three Mos. | One Mo. |
|---------------|------------|
| \$4.75 | \$1.75 |
| 3.60 | 1.35 |
| 1.15 | .40 |
| .70 | ... |
| .40 | ... |
| 1.00 | ... |

each paper
expires.

To Subscribers

Receiv

Scaphia occidentalis 554

from Miss Martin p. 230 fig.

Had eaten; trachea as in I
July 20 1.8 1.8 1.8 1.9 
" 31 1.8 1.8 1.9 1.9 / still

| | | | |
|-------|-----|---------------|------------------------------------------------------------------------------------------------|
| Aug 1 | 1.8 | trachea | Smooth |
| " 2 | 2.4 | eating | |
| " 3 | 2.4 | " |  |
| " 4 | 2.9 | " | |
| " 5 | " | trachea |  II |
| " 6 | " | " | |
| " 7 | 3.4 | eaten |  Side open |
| " 8 | 3.9 | " |  open |
| " 9 | 3.9 | still | open |
| " 10 | 4.4 | trachea |  open |
| " 11 | 4.8 | eaten |  open |
| " 12 | 5.6 | trachea | open |
| " 13 | " | trachea | open |
| " 14 | 5.8 | eaten trachea | |
| " 15 | 6.4 | eaten | |
| " 16 | 6.7 | " | |
| " 17 | 7.9 | " | |
| " 18 | " | trachea | |
| " 19 | " | " | |
| " 20 | 7.3 | " | |

Aug 21 8.5 eating

+ 22 10.5 "

" 23 10.8 "

" 24 12 "

" 25- 12 washed

" 26 " "

" 27 " "

" 28 13 still low humidity

" 29 14 eating foggy day

" 30 15 " scatting

" 31 15.1 " green w/ very little rain

Sept 1 16.2 still

" 2 15.5 eating

" 3 17 "

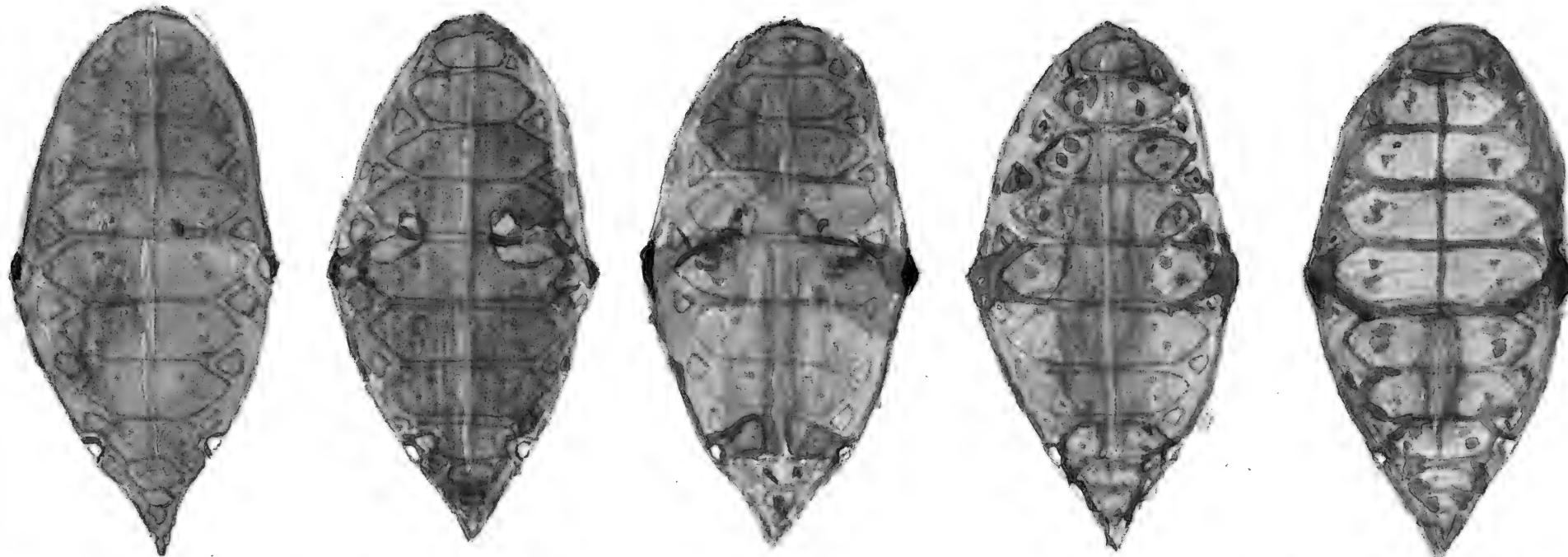
" 4 18 still

" 5 17 eating

" 6 17.5 all turned white
and stopped eating.



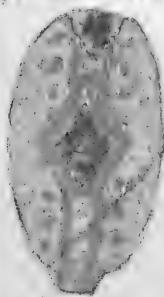
no. 3



From a series collected with Prof. Benten Müller at Long John's City (Aug. 20)
on Myrica cerifera, none had any brown on the sides.

have no criterion as
Physiological charac-
ter among other groups
whether they are
used or not. Clear
are less variable,
But granting the
constant for practice
be able to distinguish
The liquefaction of
growth forms and
indefinite or difficult
more positive tests,
generally applica-

With deer herds 22
209 11 Blacktail often comely
deers number decreased and
soft 6 (2.5%) increased as in Antilocapra
210 7 (by hide) Ed. tan yellow 3-tail
whiskers absent & hoofs
11 8 5.8 eating edge of late defoliation 6-8
11 9 5.5 " " on elliptical burnt brown
11 10 5.5 " on elliptical burnt brown
11 11 5.5 " patch slightly crimson on
11 12 5.8 " edge 6-8, d. space 3-6
11 13 5.7 (back) tan with rusty patches
11 16 5.7 by hide
11 18 5.7 eating red 3-4.



Stud Sept 17 Several species, deep sleep, cold
pts. skin - scarcely wrinkled, granular
scars marks later. Seen to be pellagra

Sept 3/16 Saw at first the 2 of us
showed a tendency to join but
the lawn was very sickly and
only ate a little. Deed 15x23



Code step I on [209] B VIII

Black

rok JF 27 1991

Bellbird

2927 1.15 ~~I~~ had just

28 2.1 after rest

29 1.4 before

30 1.6

31 1.6 th 30th moh-

day 1 1.7 morning 30th

1 1.6 " mother started

1 2 1.6 1st assumed. ①

1 4 2.0 " ②

1 5 2.2 " ③

1 6 2.5 " ④

1 7 2.6 " flat; pointed,

dark gray slate. Dark angled to,

② a rounded ridge, ③ & ④ smooth

retreated. All younger ground

was pale gray, a faint olive

hue centrally, ⑤ small,

refined. Some older ground, dark

gray like, the latticed ridges

rounded. In front of the rock of

large clear boulders. East is toward

the sun wall but not over so long

as side. ~~III~~ ^{one} ~~one~~ ^{one} ~~one~~ ^{one} ~~one~~

Planted plants all the year.

Top slope well managed. The

Another 2.4 gms ♀ found upstream
narrowly enclosing a low flat yellow
patch. Distinct ridge [] or 2 parallel
ridges, distinct several [] feet +]
I think short +

[Another step I came, 75' as on reverse.
Same place in, after water. Black oak
W.E. 1976] Height 1.0. Could not find off.
much more elevated, ledge 30 1.0 coming
slightly also more ~~wide~~ ^{wide} 3' S. It
is now ~~over~~ ^{over} 100' from the ~~ridge~~ ^{ridge}
ridge I & No 75' ~~skirt~~ ^{skirt} ~~around~~ ^{around}, ~~edge~~ ^{edge}
~~ridge~~ ^{ridge} angled in edge.

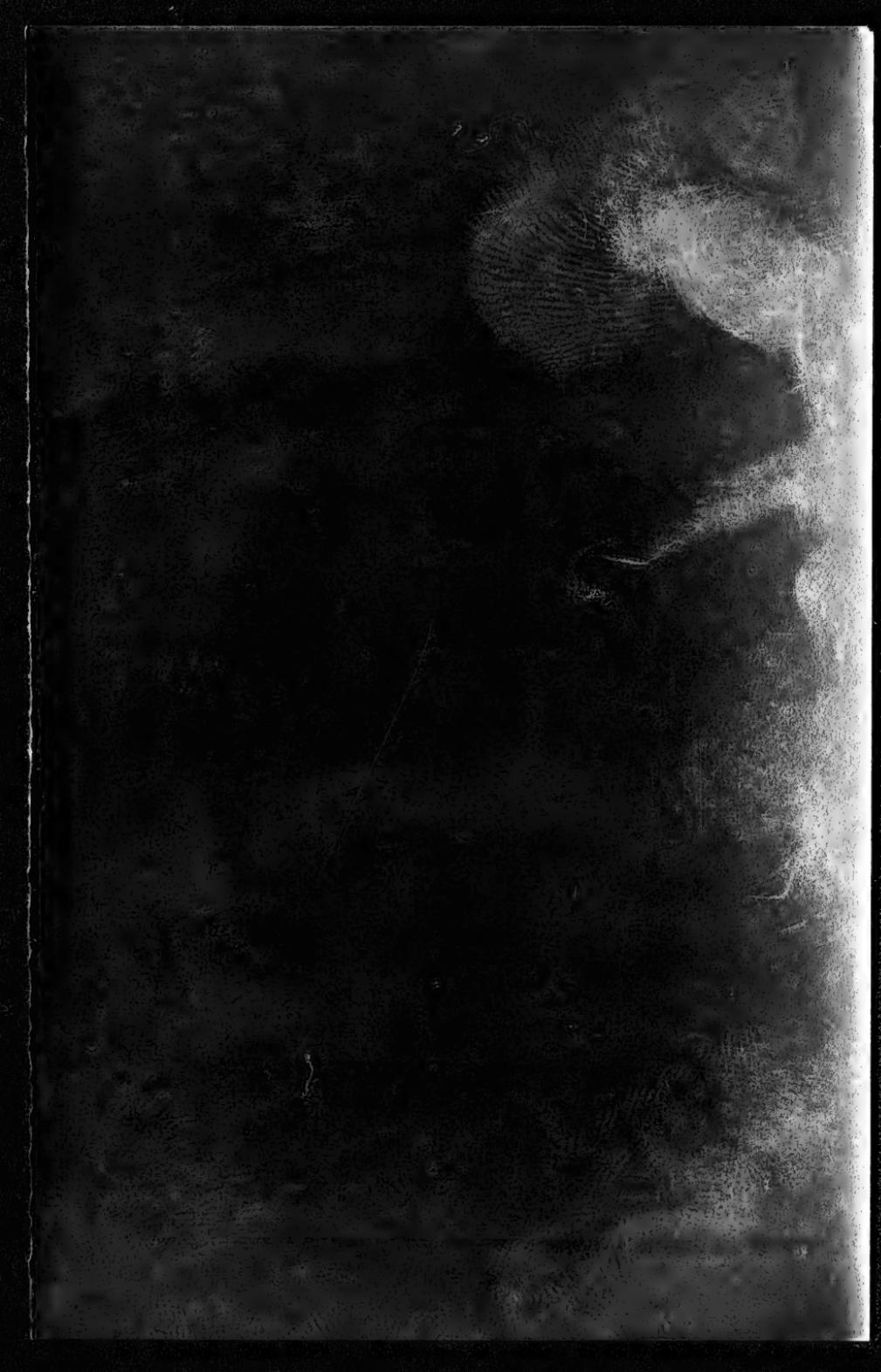
~~Another~~ 3rd I probably still on
black oak ridge 30 1.0. I am
now well away on back side, edge
top of a ledge which is ~~wide~~ ^{wide} 6' wide,
1.0 high, flat 1.0 x 6' ~~wide~~ ^{wide}
~~ridge~~ ^{ridge} angled in edge by the
ridge bed so no relationship
with ~~ridge~~ ^{ridge} ~~ridge~~ ^{ridge} ~~ridge~~ ^{ridge}
original ~~ridge~~ ^{ridge} on reverse.
With the ~~ridge~~ ^{ridge} in the W.M. ~~ridge~~ ^{ridge}

~~Third~~ ridge from 1/2 way up ~~ridge~~ ^{ridge}
long and appears ~~clear~~ ^{clear} ~~ridge~~ ^{ridge}
ridge, no better to be seen. ~~ridge~~ ^{ridge}
large appearance of sand with
no marks, top of ~~ridge~~ ^{ridge} ~~ridge~~ ^{ridge}
of the ~~ridge~~ ^{ridge} ~~ridge~~ ^{ridge} ~~ridge~~ ^{ridge}

IV 209 B

LL

Aug 7 2.2 b. b. 209 B big net 1/2 ft
" 8 2.4 many on rock covering
" 10 3.1 still 3 dep. apart.
to bed (just in will)

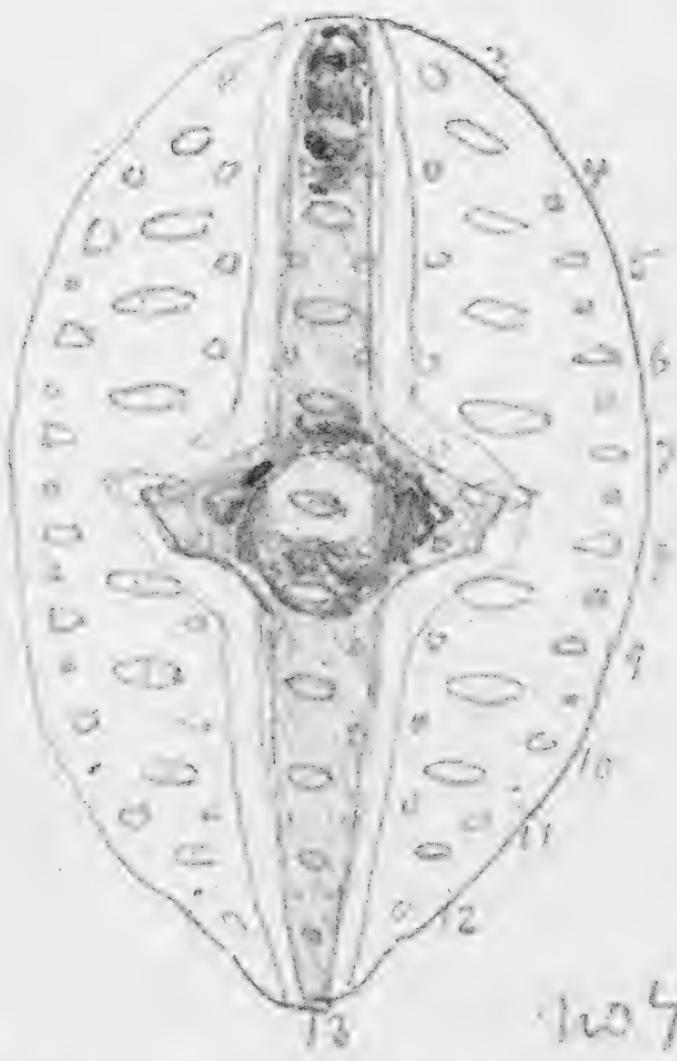


{



13

5500 gm / 1000 ml
end of stage 10



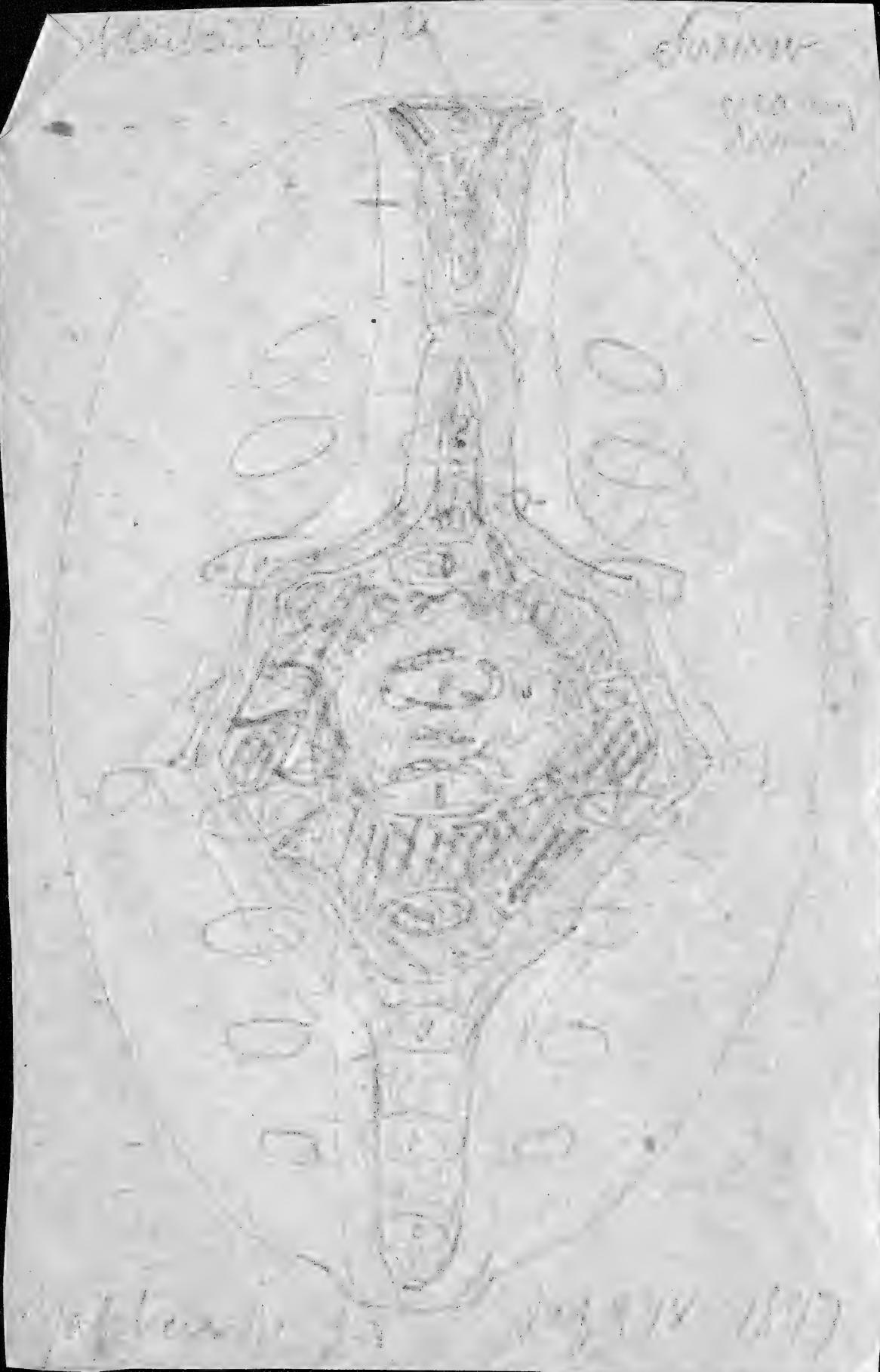
purple-black

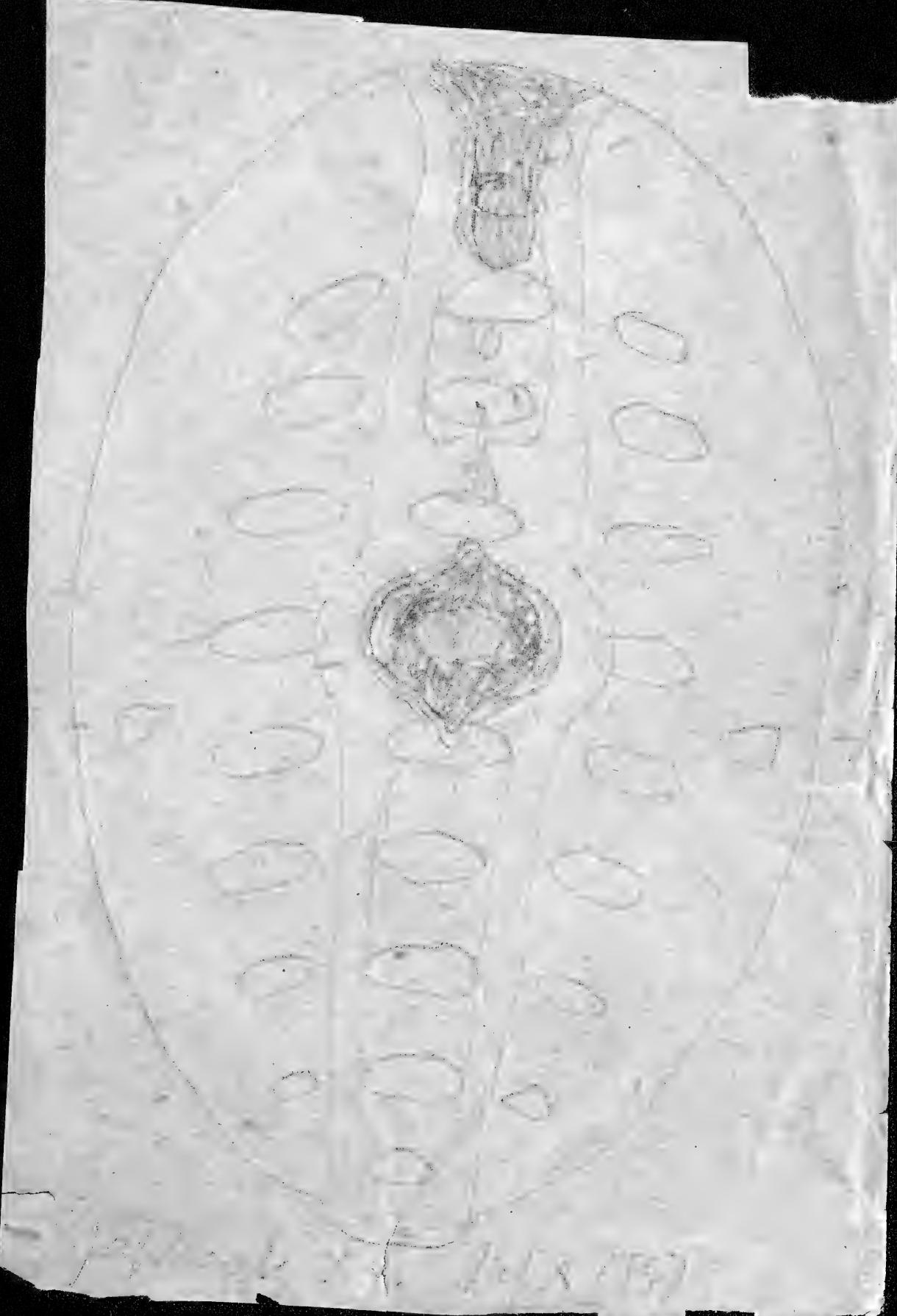


crimson



yellow



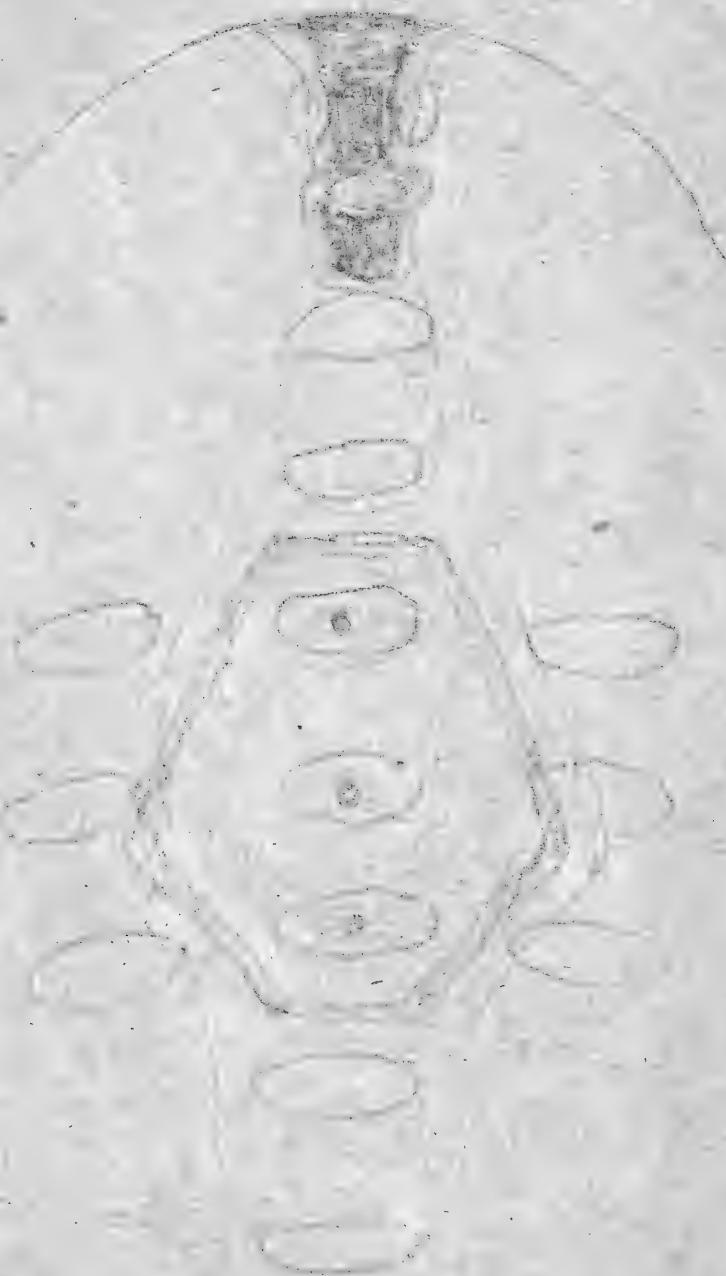


CEMTEC
O. 2009/2010
48. 11. 2010
DUE NOT



5 Mar
et

Mr.
L.





1902 last oil bird, 1903 first green albatross
yellowish, 1903 1st & 2nd Jan. 1904 first green albatross
on the latter end of January 1907 (Jan 19). A dark brown
albatross seen here (green plate 5). Was white above.
The 26th was shot? never heard before (see 1907) seabirds
~~1907~~ Aug 30 Aug 1908 Saw one albatross & the same
time second Coliornis, then
the following day, a large bird, the same
as above. I measured off length of t 67 and
from the radius along the wing 105-11. Then an
envelope was sent to the referee, Dr. G.
M. Allen, and he sent it back.

I have left 10. Last day a new male was seen
different in character from the others.
Max. greatest length of carapace 15.1 mm.

Big black Arctic fox a long yellowish tail
With top of head black, the rest, and both
with velvety black & ruffling hairs
black, apricot reddish. Throat large, i
and ii black, iii-vi white with dark fur
tubercles. Hair long, soft, sparsely
like black, the ends of the longest
hairs ending light brown. A few of the
so hair greyed. Head yellow, about 2
mm. Lateral carpal in a ball 20 mm dia.

Aug 11, 1911, just before
the fall tide.

(54) cont.) VI

as before, a yellow line and a 3rd ridge to end of broad tail, incised by ad-d
opposite the scallops filled in with dark
green. All the d. and the 2 lateral stripes
(lateral interseg and trans lat sp.)
of off-shore species. A row of matting yellow
spots along stem along lat. ridge. Skin
closely covered with small granules, clean
many quite sharp pointed, dispersed
afterwards. Dorsal, moderately deep
yellow or orange and hardly defined.
A white line along 5th edge. Head green
esp. back, green below; violet (4 rows, + 1
row) from tip to base, the ridge smooth
except for the other petals, simply angled.
Shed last 3.0 case only has back all blue. 10.0
Aug 12 color 15 cm. and 9.5 Aug 9.5 Aug 16. 9.5
on back of leaf = shed! 9.5 x 5.6 mm.

Exhibit 44, 3:30 P.M. (not seen to shed) Aug 10.5
veins of the petals blue, slender and
slit entirely inc. or even. esp. by
dark pointed as above. But with smooth esp.
ridges, a space left undivided broad lateral
blue slits, not smooth esp. some small, re-
tarded, lateral ridge. Slight part of 3d line
fixed on distal tip yellowish with fine transverse
irregular slits, the part of esp. in the undivided
line. Yellow line on 3 with greenish
and blue 3.0

Aug 11, 1911, just before the fall tide
Aug 11.2

yellowish body light green, 3rd. blue esp.
with large clear granules closely dispersed
and somewhat irregular. Dispersion spots
small, rather esp. the latter with a trans green
ind. plate, not very much granular. Upper esp
less small, greenish. The rest yellowish except
lower sp. at which are green. 10.0 x 6.0 mm.
yellow dots beneath. Head 10.0, 2.0 x 1.0
width of head 2.0 mm. Aug 21 length 11.0 mm. 11.5 x 6.5
5d. body rather yellowish green - things also a whitish
cast ~~green~~. Dark blue to red few diffuse red
into brownish pink granules. Aug 21, 13 x 6.5 mm.
Getting white like ~~pinkish granules~~. No red granules
now, but still a few. 10.0 x 6.0 mm. esp.
yellow green & thin very diff. to pale yellow,
spotted with a range in intensity, esp. along
contours, with bluish green indist. esp.
yellow than a 3 and not very shaded
but white esp. line. Several species
by 10.0, yellow rays as those of goldenrod
as here. The white line along 5th edge on
head 10.0 to dark

petals much more
~~white~~ evident than in
~~Exhibit 44~~ (or ~~Exhibit 44~~)
Aug 21 (from previous day)
width 10.0 blue deep yellow
green, now very whitish (purple
bluish) Hairs longer on 3d line
than in ~~Exhibit 44~~ esp. Aug 21 13.3 x 6.4
still white. Indist. blue green, shaded esp. trans. of
lateral esp. Aug 21 13.0 x 6.5 Aug 13.5 x 6.8 10d., dark
red trans. white esp. 10d. to brown? on bottom, later
Aug 21 in the rays.

Lynx-turd (Lagidius rosai?) collected by Richard B. Seeger, of Jefferson Highlands, Pa., on W. Adams on rocks above water line, several examples. Received this Aug 18, 1895. Head 3.2 mm. velocity brown black, S black, a reddish streak on front side of head. Mouth 3 above strip, want no 3 and 4, whitish star-like tufted dots on 10 and 11 behind. On all 1, in one example much crowded up by the base. Mouth small, is very small slig. prot. legolate distrinct. Body black with a faint gray jake; hair thick all tufted, some heavily feathered but more plumed. 1, 5 & 9 and 12 a little more closely tufted, bristled, but no true tuft and no pencils. Hair gray, mixed with black with bright yellow hair on which 11, 5 & 13 and at base, other hair branches on top. I & 7 hair bristles are 6. (See below) Found only the short skin in W. Adams.

Another from Mrs. Sherman, W. Washington, and by him taken. Hd 2.8. Rest. gray and pale reddish brown. Hair faded gray & black mixed, soft & thick the yellow hairs less numerous, densely only 7-9 and of stronger hue all the way back & r. The faded gray hairs are densely feathered 1-8, the black & yellow ones only sparsely, 9 with few hairs and short. Hair white very long, quite even but not regularly sp., no tuft or pencil ends up in a local hair action when disturbed.

Got three more today - very dark white back about 3 inches down the flanks variegated few segments of back. Washington, Aug. 22 1895. Like the others, more smoky, gray, in and of yellow hair.

Description from Bandelier sent by Dr. Hagen
Hd gray black, w 25 myt body w 1/2 of anterior
leg, black, rest iii light yellow. The
other all rusty brown, all with ho-
rizontal and stiff rather short shiny
hair black. When naked the anterior
marked by narrow shiny line contrasting
with black body. Base of ears 1 and 2 shiny.
After long black hair lost. (seen before)
Abdominal legs light yellow. The feet black.

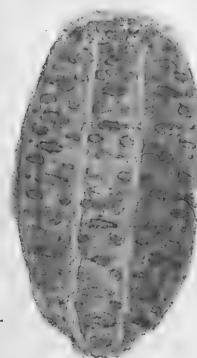
(Is this Pseudocleonus grammicus?
of Henderson? Same like
it?)

Ecclonia elongata of Dr. C. L. Koch
of May. 8-1914 was a small leaf,
A. C. C. was testaceous, granular d. p.
reuster Molted 1st time side of head
left black and anterior third of abdomen
+ 6 3.6 white below and above + 7 3.4
+ 7 3.4 " " marked on 1st abdominal leg
+ 8 3.3 white. Last time side of head, from
head 10-10. White granular on
each side of head and on each
abdominal leg. Last time side of head
white granular on each side of head
and on each abdominal leg. Last time side of head
white granular on each side of head
and on each abdominal leg.

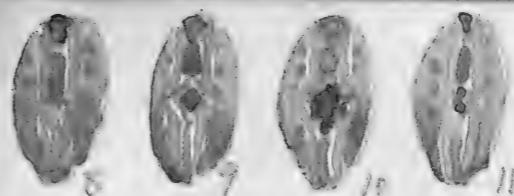
Granules 1/2 of size of testaceous
black and white and
white and black. They
are 1/2 of size of testaceous
black and white and
white and black.

Testaceous part of head + 7 3.6
and abdominal legs pale yellow
the along st. leg 4-fid con-
nected 7-8 by a bridge with
a transverse suture. Testaceous
a faint salmon color. The 2
side pale greenish yellow
darkened with old colored car-

Hd, on anterior legs, by 1/2 of width of
middle, now becoming the other in the
rest of the middle oblique. The mouth like
an inverted cone is turned out to the
right. The base of the cone is



Sept 14 1896 (continued)



E. D. Gray hope as a well record of fish to
be taken. Place with others and
very easy from which, even

a little hard to see

out. Skin & bone in

water gradually

the skin and bone

of the large fish

is very difficult to

see the skin and

bone in water.

just finished helped space 1-7 (front) and
now working on 8-10 (middle). These
are probably 10 mm. long and
about 3 mm. wide in middle of body.

Width of head, 5 mm.

On block oale Rockport Bay Island July 29 1896.

1000 ft. - 1000 ft. The sea level has been reached
and the sides of the land and edges back into you
can see the ocean floor. The water
is still somewhat darker than before
but it is not so clear and a few small fish, sharks
and other fish are following the sides.

Aug 9 1896 still

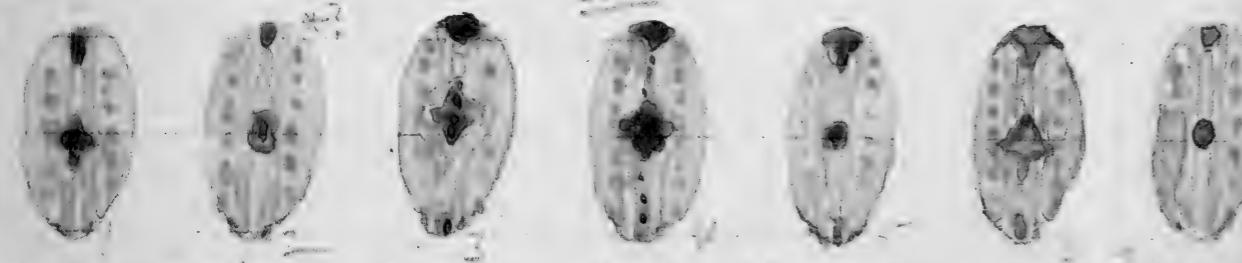
with water in large boats (dark) off
the coast.

Sea very choppy no action

and now the wind is blowing

from the west.

Wind from the west.



None of the new sea bottom (Ridge) is

seen from the boat.

in the water.

short narrow sets and angle of 8. 2 mm
and otherwise similar to those in black

Aug 10. All mostly whitish & the upper half
of all pale blue green and yellowish
and bright orange towards middle. No fine
white obscure.

Sent across to New Haven. Nothing sent by
July 25 1896.

Calculation length

$$I \quad 7 - 1.2 \text{ (round)}$$

$$558 B, C = 669$$

$$II \quad 1.0 - 1.5$$

$$III \quad 1.5 - 2.2$$

$$IV \quad 2.2 - 3.1$$

$$V \quad 3.1 - 4.4 \text{ A}3.6$$

$$VI \quad 4.4 - 6.3 \text{ C}4.5-6.3 \text{ rather}$$

$$VII \quad 6.3 - 9.0 \text{ B}6.5-7.3 \text{ P-11}$$

See notes at June 22, 25, 28, 1897. One
a few hours from ♀, the regular
Cassina ♀ -

| | | | | | |
|-------|-----|------|------|-----|-----|
| Coll. | 1.2 | 1.83 | 2.77 | 4.2 | 6.6 |
| Fins | 1.2 | 2.2 | 3.2 | 4.2 | 6.0 |

559

Apatela lithospila (Dufour) Adibell
land back May 29. 1898 Hd bilobes,
greyish yellowish above often a little darker
brown dotted yellow down into angles.
wings 1.9 mm. long, broad at 4.
and then with angles of enlarged, pointed
like quills so 1 has 3 small yellow
bands, a few feathers 2° smaller than others
a dark brown band along middle of
3-4 and 4/5 with 2 yellow bands on it, both
reaching 17 till on 8-12. 3-4 middle
between 17-18 yellow, white below
at first over 11-12, becoming white at 17
on 8-9. Hd bilobes about 1/2 as long
as fore wing, yellowish band pale yellow
whitish at base. Hd confluent at base
5/6. Fore wings with 2 small yellow
bands (one elongated) at base hairy
yellow, dark at the center part, 1
written with ferruginous.

July 17 Hd 3.2 belched, swimming in
water, few pieces of live bark clung to
body, the color yesterday & today from
earlier stage faded & lost, and especially
in the angle, with whitish. Several
long blunt white hairs. Body 12 slugs
humped, small, less in a square, the
teeth more each other than i. Hair not
so black & dark with some few
white others. The belly and
abdomen very bright green
in lines. 4-6 bars slightly mixed up
not very distinct as in green. Sides
slightly shaded rather light brown
with narrow yellow edge and blackish
shades of a uniform pale olive.
3-13 with same sides, just below of
lighter, a dark elliptical patch
7-11 (at midline) yellowish (1), rather
constricted at 12 (1)

most light hair about 4.2 mm. Green
the other a blue man, of solid & thick

brown, showing out a few black dots, the
color shade down the angles in freckled
spots in a yellowish ground, & white spots
every 2-3 cells; yellow near the nose, mouth
part yellowish. Red green, clear, a
bright white band from the sides
S. and 3-13. Slightly smaller than last
now very narrowly yellowish edged,
widened in 3 and further in deeper green
with all of 2 green. Same band in
4, just covered by skin & separated in
5-7, then wider. Yellow in 8-10, just
over it on all a narrow, fainter blue-green
i, ii in 12, narrow, with 13 has end of
and first green. Dark especially the
parts over slightly bluish shaded.
Spineless white with black ring.
hair quite dry, look very fine and
sparse i-iii spikes, the rest with a
few 2-3-4 white. Claspers a top
of brownish pale, the base green,
a number of small pale whitish

dark on the edges. Stem minutely
spinulose. tip is pointed elongated,
otherwise body nearly uniform and
more cylindrically. tubercles of next
whites. flower glumes are whitish velvety
green and awl-like pointed spikes.

Sept 17. turned olive-colored to J.

= *georgica* fc Specimen U. S. N. M. Aug 1913
See also Packard, Munro 154 560!!
Cale. 52 .86 1.4 2.4 4.0 mark
560 [Is it ^{form} oblique?]

Cravat rock, Parc de la Chasse Park, Sept. 4 1915
Slight change in color between 2 with
1 6 8 " 11¹² just under H.

flask color with three pale purple dots and
large singular white spots by regular
vertical bands on C; lateral reddish.
In green they green flushed, longitudinal
streaked with white & few broken
with black. Black dots on the two mid-
lateral bands 3 & this, and broken
black & absent on species in 3 & 10
by purple center, (twice of lateral) &
then 1. The first red wings, 11. The
rest, small white which is broken
when a few days old in fact 1-10
and white band spreading out on
mid edge of each when it is marked
with black dots with red streaks
center worn to 4, becoming still
worn to side in 6, sharply ⁹ per
edge a return to downy & dead

a little studded column & collar with
several spikes, first in V, now
white, spike again in 10, heavy &
long & pointed & goes close, the
whole covered with short
spikes with a rounded profile and
blackish whitish junction in middle
of each spike. The basal part
is white, and in a black band. There
are two to three spikes on each
studded column.

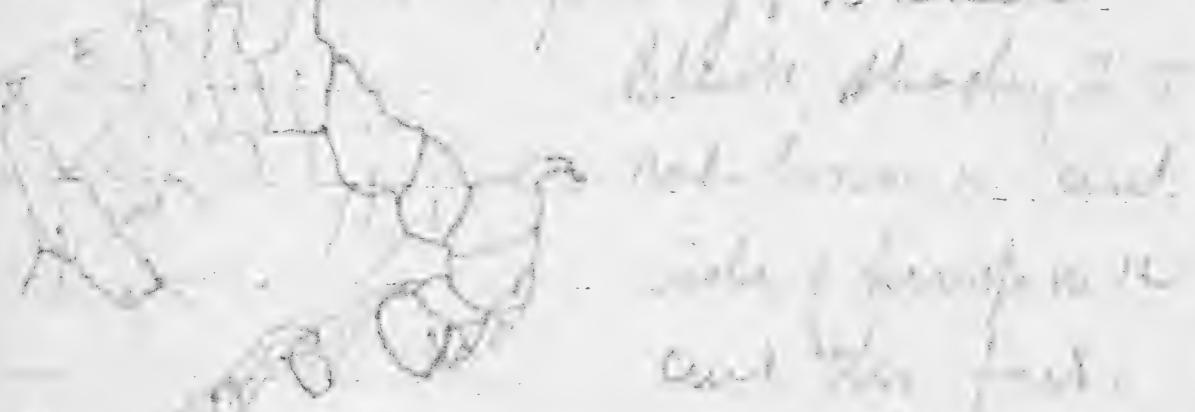
Another specimen 11 Aug 1896 Hd. 2.3 pale
brown a pointed purple band with the
marks & red & yellow; opercular side 2. A
pair of short reddish hairs on opercular.
Green streaked with white spotted with
black, a yellow very few brown evenly
spotted & 4-5 on each 10-13 white spots,
a yellow strip line 3-13, a brown strip
above it & a tiny spot 10. Opercular
all white with brown line inside the

Has a spine, which I think applies also to
10-13 but none at ① 12, or a small one
in last dorsal. In stage before about 6-12 ♀ however
below where a ~~sharp~~ ^{sharp} one in 6-11 ♂

Euchlaena elliptica (L.) found in Virginia (no
date) but all writing but this is said to be
true and the old name better. They
are a bilobed and a triangular shape
the breaking of the lobes giving them
marked markings like the dark
markings and lines of white and
black. Bands not continuous
as in elliptica but broken by
half way to middle. The markings
through 6-7 complete. There are
not in the last one a red band with
hairs on it. Green compound with yellow
green dorsal line like green color of
water and the marks of head on yellow
are separate & distinct. Black lines of tail
and shorter in proportion (some say long)
from elliptica in 6-7 & less than half as long
as 5 while in elliptica they are 3 or 4
^{or even 5} times as long as 5. Two rows ^{or even 3} of
black points situated black dots ^{or even 3} but not
above the line of the elliptica?

$$562 = 46$$

Hariharanagara lies just from below
on right. It is a large village -
area of 16.000 acres, under control
area of 4500 acres long, 13 miles.



Particulars relative to the last day comic
book sale, Oct. 10, is poor, & will
not be repeated except in so far as they
will be very brief, and you have to be
quite interested to absorb them. The
books were sold at a price of 10 cents
each, certainly. There were about
two thousand books sold. There were no
admittedly expensive talk comic strips
(See letter for details.)

(See below for details)

563

Revising my paper, probably covering
(or extending) from 1900-1910, the
series 4,000, was left 13 (1905).
Unpublished & covered with 2, 3, 4, no
11 1911. Darnell also by, also took in top 1
lot of yellow, a brown band to 2 mm.
on 3-4 read 3-4
with the D single or -10 & D & D, & maximum
all bands 1-2 mm.
on 3-6, 7, 10-13, 2 also black. White on 1
bands 5-6 and a narrow band before 8
also between 10-11 a band 5 mm. in
front light purple blue. White vicuna,
all of 7 & 9 are 3-4, has a white yellow
belly from 2 which becomes very short,
black its white from but rather large, one
white with marks (either black or yellow)
3-4 hair pale orange, 4d dark brown
Redescribed. yellow C-sh, white on 2; a
band on 3 covering 3 upper vent (i.e. i, ii + iii)
+ also vent iv + v and vi; a band on 5
+ 5 t.v.; a band on 6, 8, 10, 11, 12 & which
and pl. black with hair, purple

[Made for structure
of body, & not
particularly for
males]

patches between hind 5-6 rising from
hind 8 over posterior area of 4 to
the head & in rounded front 8-9 very
light, copper band of 8 in front, widest
at lower edge of band, between bands
10-11 and 12-13 band 10 in front
in the same groove as band 8.

A second, elongated patch on
2 below, behind the 8-9 next
hind anterior, 11 and 12 light
interspersed with dark dots,
pale in the purple markings.
The first light green, and 1-2
yellow. Next above brown black.
Spicule on joints a little higher up
than those in 6-12 but not so worn.
Second spicule on 6 & 11 a circular
inflated area, that part projects
below in a lip like protuberance

564

The "flanged copper" (T in old tax books) Eudocia
annulata on black oak, Port Lee Sept 14 1915
Sitting on a part of dead leaf eating the
adjacent living portion. All dead leaf
now variegated a little with whitish
shades with a core of dark brown spots
and areas. All fine spruce granular
setae short conic, thick pointed. The
"flanges" are a porous protuberance
arising 5-8 c. from the epiphore to
the dorsal aspect, nearly level with the
dorsum. On 3-4 they bear 3 setae in line
with spicule a 2. On 5 spicule & below
the process which bears one seta, viz. III,
above & behind; on 6-9 process bears IV & V
with spicule alone; in 10-12 the spicule
is above but there is only a point instead
of a process; C-sh 3 setae and I on 12 also
more pointed elevation. The whitish
shades are arranged longitudinally, streak
ing the body with dark & light shades.
Sept 12-13 com of new leaf, with large exsertions

Leave OK from description 565

Aleurodicus larva - megapharynx yuccae
from black & green, so well cam.
Upper surface brownish tan D.E. (in fact)
legs irregularly banded. Body
mostly covered with short fine pile,
no primary setae distinguishable.

- a large ch and 3 small
concentric areas near above apertures.
Seta above the ch about 1/2 in. long.
Head slightly yellowish granular surface
dark black above, greenish below
and very striated. Body covered in
yellowish tan. The very distinct
setulae in a band & regular linear
markings broken at the joints
in small pale points of contrast on
green. Cephalothorax consists of a double
row alternating shorter & longer
~~setulae~~ in one place a single row
of short white (not smooth)

492 Mealybug larvae & adult
which turn green fine & will drop

Bishopton SC Feb 7 '90"

Another (Brammer bx 4 disc 4) very different
head larger, much smoother, anal plate
projecting. Body smooth but with 2 kind
of rows very small fine & hair set very
close giving an additional series. This first
row absent. Cephalothorax abd. part in 3
rows pointed, greenish tan, tan, & green
from yuccae & the wings and before
abdomen, oblique red, pointed before
anally.

Abdomen (and shield) - yellowish green
and yellow, annulate, pubes, etc
not projecting, setulae in 2 rows but
less numerous than 2 in an area
before a below which they are absent.
It and other easily confused forms
have I seen, the last well developed.
This may be a small one - the same
abdominal pattern. The head is pointed &
greenish, not pale. Below it is not
green. The appearance is singular.

4610

1876

Sixty or more *Chicoreus racemosa*
 Lake Worth, Fla., Feb 25 1896 sitting on suna
 stem, singly, few in 7 and 8 not used in test.
 Head & tail slender, body wider to 5
 then gradually taper to tail; 12 + 13 are both
 small the side angles broad flat triangular,
 pointed beyond each plate. Hair long,
 slender, fine on shoulders and
 snout but distinct with numerous
 setae which are scattered in pale spots
 scarcely at all elevated into granules.
 3d line extending from mouth to 2 to hair
 white streaking below into side color, more
 or less pale yellow at the sharp upper
 border. D. sp. light teal green, an irregular
 but distinct green to be dorsal shaded
 greenish white band broadening out and
 filling the cell of spine on 2-4, still ob-
 liquely broken centered. 5d space below
 3d line likewise complete, filled in
 with same green white with pale

2d dots. Spine with median (I)
 white red band except one on 5 which
 is white with a black dot in its post.
 side (D). The side color is cut by
 faint (D) darker green oblique bands
 which run from post. edge of eye up
 to forward (covered from dorsal) only on
 a single esp. 5-11. Sub esp. line dashed
 from anal feet forward to 11 white
 & yellow like 3d and also pink
 streaked. From 11 it becomes faint
 and is scarcely visible. Thro. and 18.
 Hair pointed green with black speckle
 apex pale. Head dark green with
 narrow obscure horizontal pale band.
 Intervar 1st pink. W. 2.5 + hor 4 mm
 Sp. long 28 mm.

Externed Cnid Dec 25 P.M. and wallowed
 Recent - transparent in shape and walls
Aug 30 Feb 10 1896

Spur Jan 3, a large irregular area with a small
oval raised dot shape increase with age & size.
All pale yellow, spiracles open & a group of small
magenta black.

Imago Jan 26 1896 567 (See 569) Feeding 11982

III to a pair, take with Ma, Dec 25 1895
Head yellow ocelli black more brownish (about 2.4)
12 distinct yellow, white, dots
Body yellowish 3-4, 12-13 spots & spiracles black
I-II, IV small (8) distinct stip. points V, VI
joined more large. Hair dense, fine &
even length, black & white mixed, the
white predominating often pale gray
sparsely dashed with black. On 5 and VI
dark crimson spots, the traces, the same
length as base of hair being broader the black
joined. Hair all bristly. Side both
from III and IV to 5-6. The few hairs
to 3 long ones from 3-4 the main trace in
in Buchanan's ① 3d ② 6d (-11) ③ 5-8 (-vii)
line 2-3 with 2 tiny (each only one) at
edge, a slg. & 5 or 6 dots, few last few
the gray hairs of tip from. Skin translucent
without marks. O glands above distributed in
a oval which 3d gland hair over and
down body completely stopped eating Dec 31. And
and few. red, purple & orange wings.

568

Lemuria down to no red markings found
red. Dec. 25 1895 partly hatched.
egg. Hatching marked with black lines O
I. aspect a circle. White, thick, rounded
into gray brown but leaving a distinct
through ill defined circle of white just
about base, at upper third (3d angle) and
a narrow one around the large black
mark below spot. D. 1.4, height of mm
slightly vary, and varying according
just off in nature in batches.

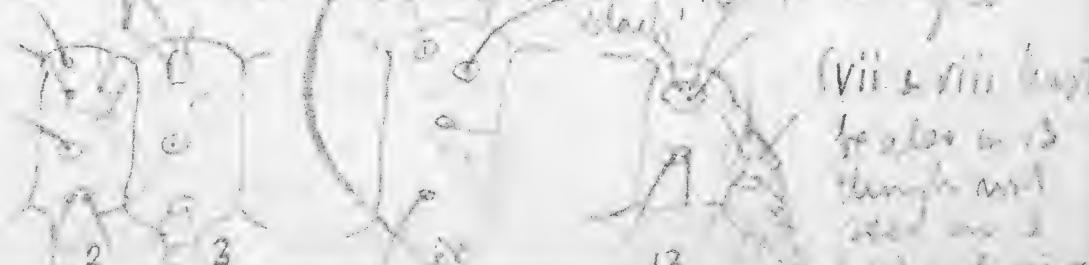
Stage I. body blackish, white and increase
gray. Hair abundant black with few
brownish ones, few white and shiny
black, labrum pale, w. 6d rather gray
blotched, w. 4d scattered, dimpled. No skin
and covering skin dotted with dots, a smaller and
below behind stip mark
in 3-4



Call. 29 41 59 .84 1.2 1.7 2.45 ratio 7
Front 3 4 6 .8 1.2 1.7 2.4

569 ± 567

Spotted by gg Cosmopterix on leaf
resting on flower of Pitcairnia spicata
Valea Park, Fla. Jan 28 1955. Single to no
spine, others 1-2 mm. in size & number.
Pattern composed with few lines in
shiny translucent wavy white bands
traced with yellow. No markings on
body. Hair small 0.4-0.6 mm. round
brown. Length 1.6 mm. mouth brown. W. 3 =
Spotted just behind eyes black, body dotted
with yellow, the hair bright
yellow. Mouth yellow. White band just
before large, elongated L. 2.5 mm
long, black, with a blackish bar
near middle. Rest of body black, the
hair blackish. Setulae black, ate midanterior
and dorsal, colorless for rest, hair 0.5-0.7 mm
1 pair 12 slightly curved, white, next darker,
are all darker, by white with several bars
VII and VIII present in dorsal, both single
barred



13

13

Spur

16-28. jagged

was white fibers in & attached to d. vessel.
Head has i, ii; 2 in dorsal piece, i in D
and 1 in fine alve mouth. Some eye
ridges to setae approximated as represented.
Gill 1, 2, 3, 4, 5 gone in color Jan 13. White, hair 2-4, 10-15
mm. pale yellow.

Molt Jan 14 Hd yellow shiny, eyes black, w. 4. Buff with
yellow at ends as in front, rest all black, next
and following, pale. Hair numerous, black & white
mix'd, most white shrivelled. W on 5 & 11 a
little bit large & stiff, otherwise, rest hair all either
yellow or pale.

(Stand 1.2)
Anterior part of a foot naked, no spines. Bd 1.3 1.60

Same, rest 6 black, hair black, next 10
are trifid. Length 14 mm. Rest distinct contrariwise.

Molt Jan 18 Hd 1.7 hair small 0.4 mm. but very stiff, 5 &
11 are just size as rest, with considerable hair. Hair all
black, white & yellow, a very few brown. 1 and 2
distinct, very wide very long, as spines & hair the 2 part
in equal numbers. Other than front 6 all square, thin.

Molt Jan 21 Hd 1.8 1.67 with soft tail. Hd 2.4

Molt Jan 21 Hd 2.6 white, red & ends of alvea black
black hair 0.4-0.5 mm. all black. Hair quite
dense, mixed, but not in all occurring body.
Hairs orange, curved, 6-10 per unit.

Molt Jan 29 Hd 2.8 Same, rest distinct, great
Hairs a little darker, rest 5 & 11 indicated
that trifid hair was preserved well.

Molt Feb 17 Hd 2.1 ± (hd 1.4) tail left quantity

another hd 2.4 Hd 2.1-2.2 " "

Molt hd 1.6-1.8 hd 1.2 " " "

Aug 25th At 3rd Ave with cottage
on left place, just left, east go 1st to 12th
street right turn Gulch back 150' to 1st
street then go north. June 1952 100' west
of 1st street, 100' S. 570

Under or Gulch Tidua, Lake will
be Dec. 29 1955. A dip basal, flattened,
tipped through, though not uniform.
Green, dusky blue, tapering most at
top, yellowish green, a narrow yellow sl. in
a dark olive green wave line above it
and deep place, whitish (part above)
5-6 fine reddish band, yellow 3-5, brown
6-8, slender 9-10, 11, 12, broadest
bright red, 6-7 9/10 pink, 13 reddish brown
colorless. Top of gl. very white.
Bands with light green in between
edges, some faint yellow dots
in broad tinting hollows. Red, brown
the top white, 3, 4, 6-12, pale green
5-9 bands tipped a broken blue lot.
line, 5-9 space undifferent colorless.
10th green from lower, often black, w/ 1st
green colorless. 10th pink, then white
edge 9x9 cm. 2.5 high. 10 cm. long.
central depression pink.

Length 1.7 mm. Width 1.2 mm. Height 1.2 mm. New
specimen 1.3 mm. Length 1.4 mm. Height 1.4 mm.
Metame 21 very glaucous green and brownish
white 1.4 mm. 1.5 mm.

Line

Dec 27 0A

Dec 29 0

Dec 30 0

Dec 31 0

2

3

4

5

6

7

8

9

10

11

12

13

14

15

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List 24 III no cult of 4/11 18 mm - 20 mm
10 mm ± 14.5 mm

- ① Dec 27 Acacia | shed June - | Shrub Jan 14 end spines || L 20
- ② Dec 29 On ^{10 mm} Mangrove | shed June - | Shrub Jan 18 | shed: Ex 12 down || L 18
in culture
- ③ Dec 29 On Catfish end spines | Spur. L 20
- ④ Dec 30 On Coconut end spines | Spur. L 20
- 1 pair end spines
cultivar on ① 13
② 6-12

Calc. lengths (and % stage)

17.2.4 34.4.9 7.10 14.3 20.4

found

1± 2. 3.5

10. 14.5 20

Received

②

①

♂ & ♀ came out together June 3, 1896. ♂ ♀ in top. Found mated
Am. June 4, parted by a box. Put ♀ in Tumbler with glass
slide and oak leaf. Laid egg night of June 4-5 over everything
nearly on the cover.

Egg shiny or in little patches (2-3) streaks overlapping.
Flattened, the upper surface low and flat, elliptical but
not of a constant shape $1.6 \times .9 \times .2$ or thereabouts, very
in thickness as well as size, nearly transparent when
in green sea, nicely whitish glass pale yellow or white paper,
shining; articulation obscure, narrow, transverse, regular, 4-5
ridges, areas, my sea is a strong deep light!

Hatching Night June 11-12 and AM June 12. Embryo comes curved
~~slightly~~ vertically, w. tail to body. Before hatching it shortens
and flattens out, clasping shell compound sideways
across egg well flattened, bounded by a line in the egg.
Body smooth, head visible and post. all skin very pale-yellow
color of egg, head not well, no marks. Length 1 mm. Setae
yellow, stiff but sharp pointed, 3 pairs across front, 2 in
eyes black. 10 holes in each row ① 3-5 large - 6, 7 very small
8 moderate, 9-10 very small 11-12 large

② 3-4 large, 6-13 fairly large (moderate)

③ 6 moderate to 4-5 7 to 8. Side view
shows that only

11-12 are 9a②

13-14 are 9a③

15-16 are 9a④

17-18 are 9a⑤

19-20 are 9a⑥

21-22 are 9a⑦

23-24 are 9a⑧

25-26 are 9a⑨

27-28 are 9a⑩

29-30 are 9a⑪

31-32 are 9a⑫

33-34 are 9a⑬

35-36 are 9a⑭

37-38 are 9a⑮

39-40 are 9a⑯

41-42 are 9a⑰

43-44 are 9a⑱

45-46 are 9a⑲

Spines square up, have more pronounced, ridge sharper than in others
joined by the others looking real body-like. No seta, not thick, sit by shells
or the spine shows through as black ones esp. notable ① 3-5, 8; 11-12.
Setae ~~all~~ June 4. ① 3-5, 8, 11-12 very large rounded, heavily bristly with
large stiff blunt ^{sharp} spines; 6-7, 9-10 very small rounded, 1 spine
② moderate with many spines, 3 or 4 larger than the rest.
3d spines, ridge well marked & like the body tubercles, ridges
through 3-4; all pale yellowish white much more of spine
head before spine finely granular dotted as marks.
Length 1.0 mm. Hd broad, eye dark, mouth broad; w. 3 mm, retracted

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joined by the others looking real body-like. No seta, not thick, sit by shells
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Length 1.0 mm. Hd broad, eye dark, mouth broad; w. 3 mm, retracted

| <u>Collection</u> | I | II | III | IV | V | VI | VII | VIII | IX | X | Y | Z |
|-------------------|---------|---------|---------|-------|-----|-------|-------|------|-----|---|-----------|-----|
| total width | .21 | .29 | .42 | .60 | .83 | 1.2 | 1.7 | 2.5 | mm. | | .5 | .5 |
| bel length | 1.7 | 2.4 | 3.4 | 4.9 | 7 | 10 | 14.3 | 20.1 | mm. | | bel width | mm. |
| 10 | 1.0-2.0 | 1.9-2.5 | 2.2-5.2 | 5.0-7 | 7-9 | 10-16 | 14.5- | | | | July 17 | |

Aug 28 1911 At Houghton Lake cultiva-
tion of trees. From Crystal Falls 183 were
the second part of Chesnut lumber 1870 ft.
present value \$1000.00 per cord.青年 1870 ft.
Aug 28 1911 1570 1500 feet 2000 2100

Enclosed in Coccolobus floridana, Take with
No. sec. 27 K.S. A elliptical, flattened,
lightest brownish, though not conspicuously
green, greenish grey, with tapering mesal at
very yellow-green, a more yellowish brown
at dorsal edge green band line above and
below. Diff. species. White bands white
and lime greenish brown, yellow 3-13, brown
and lime green 3, 4, 7, 8, 11, 12, light brown
bright red, 6, 7, 9, 10 black, 13 rather long
colored. Dark olive green with brown
sheen and bright green on dorsal
ribs, 2 rows of white diffuse dots
in broad notching hollows. Dark brown
white legs, white 3, 4, 6-12, pale green
5-8 brownish tipped. A broken fine lat.
line, 5-8 space unbroken colored.

Hd green, jaws brown, rest of body white. w 1±
spine colorless. Skin finely granular.
Body 9.84 mm, 2.43 high. (+ mouth)
color darker on head.

ac. 30. Brown becoming reddish. The 4 pairs of veins
whitish. The dorsal with 5-7 dark brownish transverse
lines on a light green ground color which
extends in the middle rows. ~~After~~ ⁱⁿ in Mangan
8 ♂ [c. 29. No clefts or spots patches
deep with lines. Length 10 mm
♀ 9 ♂ Anthonomus eucalypti var. variegatus.
Length 7-8 mm. Width 2.0 mm (2.5 with head), width 7
(1.5) height 4.5 mm. Same, but with 3
and 12 longitudinal ^{parts} ~~lines~~ ^{rows} ~~on~~ ^{along} the back,
sharpened. OB; ^{part} ~~two~~ ^{one} cut the middle
of each of 3 Ods on G-12, and also on the
sides of OB before tip. Pale yellowish green,
a yellowish band below them 2-3 mm.
below of a dark green line; a dark green
area in the place of the border and a black one
over one above it. Both of the yellowish
K. get two blue points. Antennae, pinkish, lot
whitish except 3-4 segments, and from 5-12, lot
as after a large whitish oval. Length and.

The old folk here, have
a great respect for the dead.
A good many of them are buried
in the hills above the village.
There are 345 hills here, 8 larger than 6790 ft.
all small; Yaeo - ♀ has a small, low
ridge on which lies, by day, skin spread
upon a scaffold.

Another tree seen later Dec 10 & 20 m. Same
as before, but taller & more upright. [Now all 10 m.
tall, Ø 4, 5-6-11 red barked. The trunk
is bent to the right, the whole tree given back
about 2 foot from the stem, the wood Ø in the center]
new leaves more distinct in this tree than in others

Calc. 4.6 .84 1.2 1.7 2.4 3.5 5.0 7.
1.3 3.5 5.0

571

Action? in Coccoloba uvifera, taken with
the Dec. 27, 1895. IV. The orange brownish, a
black red shade 5-11, variegated d. at
times and most pronounced there (5-11)
V. Black or 5-11. Clusters on a branch
head round, shiny green, black on apex,
above bright yellow; white just hair
line, then white with a few black
spots on the mouth and in 5-11.
A short streak red variegated a 4 and 12;
a few large pale bars at each end.
IV about (6 bars) of red, leg white shiny;
two nests in 3-4 above strip and, on others
1, 2, considerably reduced. 5 d. found
from 2 to 4 + ③ of 12.

~~IV~~ ~~V~~ large a tree hole on Coccoloba uvifera
Paler back, Dec 29. Head round, shiny
mahogany red, pale along bottom. Hair
to 2-3 (blue like sand) a base of bottom
white, shiny. W. 5 mm. Hair thick, the
curly, the body, unbroken. No i.

Aug 19 1896 Haliotis maculata
Tentacles out June 22

chocolate brown (crested and appearing
darker along a line, on 4 from 8 and ③)
a white pencil and a few whitish
long hairs from same with a 2. The
hair separate 3-6 exposing the skin
at various which is slightly variegated
the three upper with no 3 and 4 being white
+ set off by black patches on the skin. 1
a white band 2-3 on 12. Skin fleshy
brown (as far as can see it) smooth, white
2 is elevated, its upper surface brown we
bend hair (red pointed). Nests 1-6 on
AB, few in 3-4. Infraorbital but not full size
length about 30 mm. See 31 three more variegated
shade from yellowish with white and
in the rest to chocolate brown. But all
red brown or spotted with black patches
slightly, number of all shaded with black
except the legs. Dorsal incisure 3-4 well
spaced, red or by black and the six
white rays (①③, ①③④) the hair from ②
downwards are often a scattering tuft.

III step before kids 3.5 mm head red
brown, a little bluish above the white
line with two rows of tubercles. Hair
thin, skin shiny. Arrows brown
with black d. shade & specular marks
& blackish grey shading darker tip.
Hair brown, arachnoid tipped to chocolate
peach same. Back in 3-4 patches,
divided by d. black line & surrounded by
black spotting. Long hairs from 3 scales
defined into bunches mostly white.
An old, turned silver gray, bluish along
the crest & in a wider patch 4-5

572

8/18/96
1896

Musotia on live oak, West Palm Beach Jan 1
of usual structure (see Clem) 1^o spines
black, 1³ long, 2^o rounder orange, dist.
Head shiny red brown. Body red brown
a dorsal, subdorsal (D), lateral (l), atropodal
and 5 or 6 slender black bands. Dorsal and
stg. sharp, narrow, the others almost to
or failing whole spine. All except 3-4 are
bordered by white blurred line on the
inner side, tips below stg. line very
distinct all the time becoming broken on
12, leaving the anal and anal all the
feet red brown. Spine l. long w. 2, a
fair on 12. W. 1.1 3.5 4 mm. In large
example the skin has a fleshy tract
different from the back & plates, while the
shaded line tend to be broken at the 1^o
spines.

20 29 at 18 August 1996
Musotia n. sp.

Little Batavia perhaps minima or live oak
West Palm Beach, Fla. Jan 1 1896. Hd black
(hd 1.7)
2 mm. Body red-brown, most black, stripes
dark, rather entire yellow, of bright orange
red. Pedal & rest v. distinct but opposed
opposite drawing black. Rest yellow except
by plate. C-th yellow except a red dark
black line. Anfl, thor., & rest for 4-5.
Hairs all white. On 2^d abd + thor.,
black sparse, most ^{black} sparse, each
very yellow with black central line, stripes
fully as broad as spaces, lower yellow hair
all white, rather abundant. Hd 2.75±
Pedal & rest v. distinct, more of first orange
only one molt to last stage. Hair not
long but of the largest.
probably minima. see sketch.

Calc. .55 .78 1.1 1.6 2.3 (2.75) 3.3 ratio 20
Found .5± .75 1.2 1.6 2.2 2.8 3.3 $\Sigma 70 = 84$
Conopeum fidelissimum 574

Feb 11
Beautiful crimson (& shiny violet blue)
(a few are a brown)
lance on Ecclites (umbellata, ~~acutifrons~~) on
a plant, toward the Sea Palm Beach, Fla. Jan
2, 1896. Head and body beautiful crimson
red, not shiny; joints shiny red, center
of them shiny violet-blue, the areas
around these want dissolved, blackish
spots pale edge. On 2-4 only the two
lowest and third as 5, 6, 9, 10, 11 are the
rest blue, the blackish shades predomin-
ating a-d; on 7, 8 & 12 next ii-vi flushed
Hairs sparse, on 9-10 h a want, stiff
brushed, rather flat, black; from 1 on
3, a single stiff white hair 4 times
as long as any other project forward
over the head, probably serving as antenna.
A few long black hair from 12 & 13.
Part i-vi by plate removal, is rather
small. On 3 (and ita near) fused but
separately, more sparse on 4; it is a
single hair rather soft, in a single hair

1000 ft. up, wood & rock - dry grass & shrubs
abundant. Temp. 70°. Dec 4 1916

W+R a pale yellowish olive green
with a pink edge of red, most before sunrise
and sun. W. 1st 1.2 mm + 2.4 ± 3.3 ± 1.20-3.0

± 1.2 mm + 1.6 mm max. 1.5 ± 1.2 ± 2.2

III 1.2 mm done. The color of the W. is a

little more orange, the blots look like

egg shells front, 24 g. white leaf, laid

scattered. Egg by rounded, more than linear

spineled O with flat base, colors vary

and at base often very

shiny. 3.0 - 1.5 mm, bright green

III 1.2-1.8 mm (1.5) like wet. 5.4 mm long

longer than the 2nd, about 1/2 the size

of 1.5-1.6, 9-11 small purple spots, becoming

more purple 3-4, black edge, the front 2-3 with

one black blotch off center, with most

black dots on it. No purple on 1.5-1.6. The purple

and black spots are scattered, there

are purple spots 5-6, 11 others black. The black ones are scattered, some are not in

groups or single pairs. 11 purple dots on the

blotches and 11 others. A single point had large, purple blotches

like 1.5-1.6 mm apart.

IV. Same but with whole leaf - 1.5-1.6

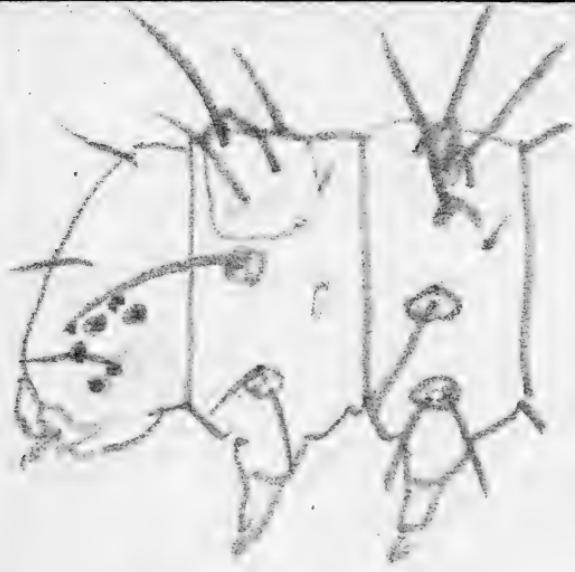
mm. 14-15 mm. mostly 14-15 mm. 16

mm. 14-15 mm. 14-15 mm. 16-17 mm.

Dipteronia

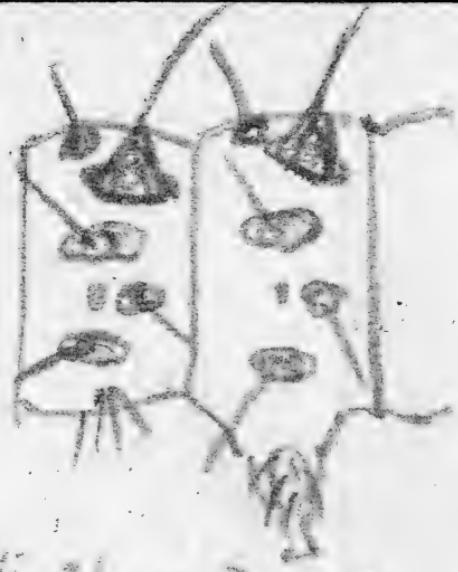
Congerinae

Millettia



BB 574

Step I



VII Shaded 5-6
VIII 1 "



VII Haired 11-12
VIII 1 "

Ciliates numerous with body
not distinct, anal pl. slender

Our Motto will always be unvarying courtesy and truth
and unremitting activity in anticipating the demands of

Notice next molten

Shed 2.7

New shed 4+

I44 - I46 West 125th

NETTWEEN LENOX & SEVENTH AVE

Other shed

Sheds Feb 24

2.2

2.3

2.5

2.6

2.4

2.5

2.6

2.4

2.3

2.5

2.4

2.3

2.5

Mar 4

4 shed

Cornus carpus erecta (Spanish oak) tree with
ridges, roof like margins



Mikania scandens vine

Phoradendron recens vine



Coccoloba floridana tree
"juvifera"

Echites umbellata
"corynoides"

Simaruba glauca (bitterwood) tree
"ciliata" "villosa" "minima"

Citharexylum villosum

Larva crazy, and to hide in the grass often
sit still. Imago Feb 14 1896 ♀

W+R a few warts (as also vi. On 2 hairs from
and a few, edge of each, start before spiracle
and S.V. W. hd. 3.2 mm + 3.4 + 3.3 + L 20-30

hd 1.2 mm Jan 14 hd. 1.6 like most. M. Jan 15 hd 2.2

Stage III 1.2 + the same. The color of the body is a
little more orange, the blackish shades bind.

Egg on same plant. 24 in back of leaf, laid
scattered. Every crowded, and then binds.

Spherical O with red base, valves scarcely
anomalous. Deep other yellow, very slightly
shiny. Brown 1.3 mm; bright green

W. hd 2.8 mm (5th) like most. So black shades

Stage II = III

by then V. Length 20 mm +
eggs hatched Jan 15 the hd. hairy, shiny. Body dark orange
Sept. 5, 6, 9-11 reddish purple, just above skin
in purple seg. blue black; tho. feet & legs & dots black.
Hairs black, strong & stiff, single ones on the parts
sprinkled & pointed. Hd orange w. 5+ after 1st
white head cap at front and last few scattered.

Stage IV. Hd. ^{hd. 8+} many hairs coocolor three
in purple segs 5-6, 9-11 blue black. Hair blades in
the 2 long rows and two in most. Feet black.
Nots have central hair & radiating ones, no off. It
which is single hairy. VI present large. On thorax
; long and ~~thin~~ ^{thin} (a single hair) but large, fused 6 mm
size of 1 - 3rd. or 4th. part.

With Jan 28 Hds 1.1 each the whole body purple blue.

M. Jan 29 Hd 1.7 mm Mott Feb 13 Hd 2.2 (fused) Feb 16

Mott Feb 27 hd. 3.7 (sh hd 2.6), 2.8 (sh 2.3) { 3.5 (sh 2.7) }
{ 2.9 (sh 2.3) }
{ 3.4 (sh 2.7) }

